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ABSTRACT

While in 3rd grade, 487 students were selected for placement in special classes for the gifted from grades 4 through 8. Teachers of the special classes were chosen by school administrators. Their teaching experience averaged 9 years, and eight held advanced degrees. Sixteen attended special summer programs on the gifted and were given inservice assistance. Results indicated that the program children equalled or surpassed the controls in academic achievement as measured by standardized tests despite the fact that their supplementary enriching activities reduced by about one half the time spent on regular classroom activities. Further results indicated skill in foreign language, research, and critical thinking as well as growth in social awareness and concern, leadership, creativity, interests, and self reliance in school activities. Approval of the program by both teachers and parents was noted. (Author/JD)

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Grouping of the Gifted

AN EXPERIMENTAL APPROACH

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with the assistance of

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FOREWORD AND HISTORY

A little over ten years ago several people in the Peoria area became interested in offering additional study programs for some very bright students who were quite obviously not being sufficiently challenged by the regular classroom curriculum.

This extra work involved the study of German, French, and an intensive literature reading program before and after school. It soon became apparent that the extra work was stimulating to these children and did not appear to interfere with their regular work.

At about this same time Father John Sweeney, the then Superintendent of Peoria Diocese Catholic Schools, contacted me as a representative of the Allied Foundation to request a grant to defray the expenses of a proposed Junior Great Books Program for the Catholic Schools. The participants, he said, would be limited to very bright youngsters in the seventh and eighth grade. This suggested plan seemed to fit exactly into our personal experience and to offer a real opportunity to reach a great many additional bright students. After the plan was submitted to members of the Allied Foundation, a small local family foundation, the Peoria Public Schools through its Superintendent, Dr. Mark W. Bills, the then President of Bradley University, Dr. Harold Rodes, and Father John Sweeney decided to commence a program of Junior Great Books for both the Peoria area Catholic Schools and the Peoria Public Schools, with Bradley University as the central control point. Participation was to be based on Stanford-Binet I.Q. Tests administered by Bradley University.

At approximately the same time the members of the Foundation, the administrators of the school systems involved, and the President of Bradley University decided that a general program for gifted children in the Peoria area should be undertaken.

The Foundation authorized a grant to permit teams to visit the existing Gifted Programs in school systems at Palo Alto, California; Portland, Oregon; Cleveland, Ohio; Evanston, Illinois; and Glencoe, Illinois; these teams were to determine what these programs for the gifted had developed and what we should propose for a program in Peoria. The late Carl Placher of the Peoria Public School System was a member of these teams and contributed substantially in setting up our program.

These visits crystalized our thinking. In 1962 Dr. Frances Halstrom was employed as coordinator of the Peoria Program for Gifted Children. Dr. Halstrom, in addition to her duties as coordinator, became a member of the faculty of the College of Education of Bradley University. A program in the spring of 1963 for preparing teachers for such a program and a summer school course at Bradley University were instituted under the supervision of the coordinator.

In the spring of 1963 one hundred third graders were selected by the two school systems after testing by Bradley University. That first year fifty public school pupils and fifty Catholic school pupils were admitted into special gifted rooms in each school system to commence that fall.

During the summer session in 1963 the Allied Foundation financed a lecture program at Bradley University. Dr. Paul Hanna of Stanford University, Dr. G. Wesley Sowards of Stanford University, Dr. John W. M. Rothney of the University of Wisconsin, Dr. Calvin Taylor of the University of Idaho, and Mrs. Natalie Robinson Cole of Los Angeles, California, were the highly informative and stimulating lecturers. The public reaction to these lectures was so enthusiastic that initial acceptance of the program was assured.

After one of the lectures, Dr. Paul Hanna suggested that we had the unique opportunity to determine whether or not our program here actually produced better results for children of this type than would leaving them in their unselected classrooms with children of varying abilities. The idea of a research program testing our experimental program was accepted as our responsibility. A research committee was formed to direct, control, and evaluate such research. It was headed by Dr. Leo G. Bent, Dean of the College of Education, Bradley University, and had as members, Dr. John W. M. Rothney, Director of the Research and Guidance Laboratory for Superior Students, University of Wisconsin; Dr. G. Wesley Sowards, formerly of Stanford University, now Chairman, Department of Elementary Education, Florida State University; Dr. Frederick McDonald, formerly Director of the Terman Gifted Child Research at Stanford University, now Associate Dean of Instruction, School of Education, New York University, and myself. Wilber Simmons, Charles Lewis, and Richard Kalus each served as chief research assistant to the committee.

After careful consideration it was decided that a comparison group would be established in Rockford, Illinois. Rockford was thought to be a good comparative situation in that the cities of Rockford and Peoria were quite similar in size and socio-economic status. In addition, a Peoria comparison group was selected whose members were in the grade ahead of those students selected for the initial experimental program.

The experimental program started in September of 1963. The research program began later that same fall.

The cooperation of the Rockford Public Schools and Rockford Catholic Schools was, and continued to be, magnificent. Miss Ann Gustafson, the head of Elementary Education in Rockford Public Schools, and Sister Mary Celine, Rockford Diocesan Elementary Supervisor, have helped in every possible way to see that all data were collected and processed to the end that the research would be definitive and meaningful.

A very special vote of gratitude is due to the late Father John Sweeney for his contribution to the initial effort, his devotion, his great energy, wisdom, and help in furthering the program throughout the years. Everyone connected with the program deserves a great deal of thanks and gratitude from this community. But of these, Father Sweeney must rank first on the list.

W. McD. FREDERICK

CONTENTS

Acknowledgements	i
Foreword and History	iv
Tables	viii
I. Introduction	1
II. The Schools	7
III. The Program	18
IV. Instruments and Their Use	25
V. Achievement Test Data	29
VI. Development as Measured by Descriptive Instruments	54
VII. Pupils Opinions, Interests, Self Appraisals and Social Relationships	61
VIII. Parent Opinions	66
IX. Teacher Opinions	73
X. Summary, Conclusions, and Implications	76
Appendix "A" - Tables and Figures for Chapter II	79
Appendix "B" - Tables and Figures for Chapter V	107
Appendix "C" - Tables and Figures for Chapter VI	135
Appendix "D" - Tables for Chapter VII	145
Appendix "E" - Tables for Chapter VIII	171
Appendix "F" - Samples of Interviews with Teachers - Chapter IX	173

TABLES

Table		Page
2.1	Public School Third Grade Pupils Nominated for Stanford-Binet Testing, Spring 1964	8
2.2	Catholic School Third Grade Pupils Nominated for Stanford-Binet Testing, Spring 1964	8
2.3	Public School Third Grade Pupils Nominated for Stanford-Binet Testing, Spring 1965	8
2.4	Catholic School Third Grade Pupils Nominated for Stanford-Binet Testing, Spring 1965	9
2.5	Marks of Program Pupils in Third Grade, Class of 1964-65	9
2.6	Marks of Program Pupils in Third Grade, Class of 1965-66	10
2.7	Metropolitan Reading Achievement Test Scores	10
2.8	Otis Alpha I.Q. Scores of Program Pupils	11
2.9	Stanford-Binet Test Scores for Program Pupils	11
2.10	Quotients of Pupils Re-tested with the Wechsler Intelligence Scale for Children	12
2.11	Public Program Pupils' Converted Scores and National Norms	12
2.12	Catholic Program Pupils' Converted Scores and National Norms	13
2.13	Stanford-Binet Scores of Program and Comparison Pupils, Class of 1964-65	14
2.14	Stanford-Binet Scores of Program and Comparison Pupils, Class of 1965-66	14
2.15	Significance of Difference Between Public Program and Comparison Groups on STEP Tests, Class of 1964-65	15
2.16	Significance of Difference Between Catholic Program and Comparison Groups on STEP Tests, Class of 1964-65	15
2.17	Significance of Difference Between Public Program and Comparison Groups on STEP Tests, Class of 1965-66	16
2.18	Significance of Difference Between Catholic Program and Comparison Groups on STEP Tests, Class of 1965-66	16
2.19	Matching of Comparison to Program Pupils on Basis of Hollingshead Socio-Economic Classification Scale	16
3.1	The Program Teachers, 1967-68	20
4.1	Evaluation Instruments	28

5.1	Summary of Analyses of Covariance on STEP Eighth Grade Scores of Program and Comparison Public School Gifted Children, Match I and II (N=48)	31
5.2	Summary of Analyses of Covariance of STEP Scores of Program and Comparison Public School Gifted Children, Match III	31
5.3	Significance of Difference of STEP Scores of Public Fourth Grade Pupils, Class of 1964-65 (N=39)	33
5.4	Significance of Difference of STEP Scores of Public Eighth Grade Pupils, Class of 1964-65 (N=39)	33
5.5	Summary of Analyses of Covariance of STEP Scores of Seventh Grade Public Program and Comparison Classes, Match I and II (N=62)	34
5.6	Summary of Analyses of Covariance of STEP Scores of Seventh Grade Public Program and Comparison Classes, Match III (N=86)	34
5.7	Significance of Difference of STEP Scores of Public Fourth Grade Pupils, Class of 1965-66 (N=47)	36
5.8	Significance of Difference of STEP Scores of Public Seventh Grade Pupils, Class of 1968-69 (N=47)	36
5.9	Summary of Analyses of Covariance of STEP Scores of Eighth Grade Catholic Pupils, Match I and II, Class of 1964-65 (N=16)	37
5.10	Summary of Analyses of Covariance of STEP Scores of Program and Comparison Eighth Grade Catholic Pupils, Match III, Class of 1964-65 (N=54)	37
5.11	Significance of Difference of STEP Scores of Catholic Fourth Grade Pupils, Class of 1964-65 (N=32)	38
5.12	Significance of Difference of STEP Scores of Catholic Eighth Grade Pupils, Class of 1968-69 (N=32)	38
5.13	Summary of Analyses of Covariance of STEP Scores of Seventh Grade Catholic Pupils, Match I and II, Class of 1965-66 (N=36)	38
5.14	Summary of Analyses of Covariance of STEP Scores of Seventh Grade Catholic Pupils, Match III, Class of 1965-66 (N=62)	40
5.15	Significance of Difference of STEP Scores for Catholic Fourth Grade Pupils, Class of 1965-66 (N=32)	40
5.16	Significance of Difference of STEP Scores of Seventh Grade Catholic Pupils, Class of 1965-66 (N=32)	42
5.17	Summary of Significant Difference of STEP Scores Obtained for all Groups	42
5.18	Summary of Two-way Analyses of Covariance by Treatment and I.Q. Level for all Groups, Match I and II	47
5.18A	Public Schools, Seventh Grade, Class of 1965-66 (N=58)	47
5.18B	Catholic Schools, Eighth Grade, Class of 1964-65 (N=13)	48
5.18C	Catholic Schools, Seventh Grade, Class of 1965-66 (N=32)	48

5.19	Summary of Two-way Analyses of Covariance by Treatment and I.Q. Level for Public Schools, Eighth Grade, Class of 1964-65 (N=72)	49
5.19A	Public Schools, Seventh Grade, Class of 1965-66 (N=82)	49
5.19B	Catholic Schools, Eighth Grade, Class of 1964-65 (N=50)	50
5.19C	Catholic Schools, Seventh Grade, Class of 1965-66 (N=58)	50
5.20	Summary of Significant Difference Obtained for T-tests of STEP Scores Classified by I.Q. Level	51
5.21	Means and Standard Deviations for Program Pupils on Foreign Language Tests, Class of 1964-65	52
5.22	Means and Standard Deviations for Program Pupils on Foreign Language Tests, Class of 1965-66	52
6.1	Significance of Difference of Essay Test Scores for Public Eighth Grade Pupils	54
6.2	Significance of Difference of Essay Test Scores for Public Seventh Grade Pupils	54
6.3	Significance of Difference of Essay Test Scores for Catholic Eighth Grade Pupils	55
6.4	Significance of Difference of Essay Test Scores for Catholic Seventh Grade Pupils	55
6.5	Reading Records of Public Pupils	56
6.6	Reading Records of Catholic Pupils	57
6.7	Ratings of Pupil Interviews on "Intellectual Curiosity" Class of 1964-65	58
6.8	Ratings of Pupil Interviews on "Intellectual Curiosity," Class of 1965-66	58
6.9	Ratings of Pupil Interviews on "Self-Direction in Learning," Class of 1964-65	59
6.10	Rating of Pupil Interviews on "Self-Direction in Learning," Class of 1965-66	59
8.1	Advantages of the Gifted Program Cited by Parents	66
8.2	Disadvantages of the Gifted Program Reported by Parents	67
8.3	Improvements in Program Suggested by Parents	68
8.4	Parents' Responses to a Question About Their Children's Special Talents and Skills	69
8.5	Parents' Statements in Answer to the Question "What Does Your Child Do When There is Nothing He Has to Do?"	70
8.6	Parents' Statements about Their Children's Choice of Friends	70
8.7	Parents' Appraisal of Their Gifted Children's Attitudes Toward Their Classes	71

FIGURES

3.1	Organizational Chart Presenting Program Coordination	19
5.1	Means for STEP Tests for Eighth Grade Program and Comparison Public Pupils, Class of 1964-65	32
5.2	Means for STEP Tests for Seventh Grade Program and Comparison Public Pupils, Class of 1965-66	35
5.3	Means for STEP Tests for Eighth Grade Program and Comparison Catholic Pupils, Class of 1964-65	39
5.4	Means for STEP Tests for Seventh Grade Program and Comparison Catholic Pupils, Class of 1965-66	41
5.5	Means of Public Program and Comparison Eighth Grade STEP Scores by Grade, Class of 1964-65	44 - 46

APPENDIX "A"

TABLES

Table	Page
II.1 Significance of Difference Between Public Program and Comparison Groups on STEP Tests - "Superior" Classification, Class of 1964-65 (N=15)	80
II.2 Significance of Difference Between Catholic Program and Comparison Groups on STEP Tests - "Superior" Classification, Class of 1964-65 (N=9)	80
II.3 Significance of Difference Between Public Program and Comparison Groups on STEP Tests - "Very Talented" Classification, Class of 1964-65 (N=17)	81
II.4 Significance of Difference Between Catholic Program and Comparison Groups on STEP Tests - "Very Talented" Classification, Class of 1964-65 (N=23)	81
II.5 Significance of Difference Between Public Program and Comparison Groups on STEP Tests - "Talented" Classification, Class of 1964-65 (N=7)	82
II.6 Significance of Difference Between Catholic Program and Comparison Groups on STEP Tests - "Talented" Classification, Class of 1964-65 (N=1)	82
II.7 Significance of Difference Between Public Program and Comparison Groups on STEP Tests - "Superior" Classification, Class of 1965-66 (N=14)	83
II.8 Significance of Difference Between Catholic Program and Comparison Groups on STEP Tests - "Superior" Classification, Class of 1965-66 (N=7)	83
II.9 Significance of Difference Between Public Program and Comparison Groups on STEP Tests - "Very Talented" Classification, Class of 1965-66 (N=16)	84
II.10 Significance of Difference Between Catholic Program and Comparison Groups on STEP Tests - "Very Talented" Classification, Class of 1965-66 (N=20)	84
II.11 Significance of Difference Between Public Program and Comparison Groups on STEP Tests - "Talented" Classification, Class of 1965-66 (N=17)	85
II.12 Significance of Difference Between Catholic Program and Comparison Groups on STEP Tests - "Talented" Classification, Class of 1965-66 (N=5)	85
II.13 Health Problems of Pupils, Class of 1964-65	86
II.14 Health Problems of Pupils, Class of 1965-66	86
II.15 Favorite Recreations of Pupils, Class of 1964-65	87
II.16 Favorite Recreations of Pupils, Class of 1965-66	87
II.17 Favorite T.V. Programs of Pupils, Class of 1964-65	88
II.18 Favorite T.V. Programs of Pupils, Class of 1965-66	88
II.19 Parts of Newspapers Read by Pupils, Class of 1964-65	89
II.20 Parts of Newspapers Read by Pupils, Class of 1965-66	89

II.21	Favorite Magazines of Pupils, Class of 1964-65	90
II.22	Favorite Magazines of Pupils, Class of 1965-66	90
II.23	Books Read by Pupils, Class of 1964-65	91
II.24	Books Read by Pupils, Class of 1965-66	91
II.25	Outside School Activities by Pupils, Class of 1964-65	92
II.26	Outside School Activities by Pupils, Class of 1965-66	92
II.27	Pupils' Activities in Sports, Class of 1964-65	93
II.28	Pupils' Activities in Sports, Class of 1965-66	93
II.29	Hobbies of Pupils, Class of 1964-65	94
II.30	Hobbies of Pupils, Class of 1965-66	94
II.31	Educational Ambitions of Pupils, Class of 1964-65	95
II.32	Educational Ambitions of Pupils, Class of 1965-66	95
II.33	Vocational Ambitions from Pupil Interviews, Class of 1965-66	96
II.34	Closest Friends' Description of Pupil, Class of 1965-66	97
II.35	Pupils' Parents Responses on Sibling Information	98
II.36	Socio-Economic Status of Pupils' Parents	99
II.37	Reading Interests of Pupils' Parents	100
II.38	Civic Activities of Pupils' Parents	101
II.39	Hobbies of Pupils' Parents	101
II.40	Education of Pupils' Parents	102
II.41	Parental Appraisal of Child's Health and Physical Fitness	102
II.42	Parental Appraisal of Child's Superior Ability	103
II.43	Parental Appraisal of Child's Problems at Home	103
II.44	Parental Appraisal of Child's Hobbies	104
II.45	Parental Appraisal of Child's Interaction with Playmates	104
II.46	Parental Appraisal of Child's Reading Interests	105
II.47	Parental Appraisal of Child's Closest Friends	105
II.48	Parental Appraisal of Child's Special Talents	106

APPENDIX "B"

TABLES

Table	Page
V.1 Significance of Difference of STEP Scores for Public Fourth Grade Pupils - Classified as "Superior," Class of 1964-65 (N=15)	108
V.2 Significance of Difference of STEP Scores for Public Eighth Grade Pupils - Classified as "Superior," Class of 1968-69 (N=15)	108
V.3 Significance of Difference of STEP Scores for Public Fourth Grade Pupils - Classified as "Superior," Class of 1965-66	110
V.4 Significance of Difference of STEP Scores for Public Seventh Grade Pupils - Classified as "Superior," Class of 1968-69	110
V.5 Significance of Difference of STEP Scores for Public Fourth Grade Pupils - Classified as "Very Talented," Class of 1964-65	112
V.6 Significance of Difference of STEP Scores for Public Eighth Grade Pupils - Classified as "Very Talented," Class of 1968-69	112
V.7 Significance of Difference of STEP Scores for Public Fourth Grade Pupils - Classified as "Very Talented," Class of 1965-66	114
V.8 Significance of Difference of STEP Scores for Public Seventh Grade Pupils - Classified as "Very Talented," Class of 1968-69	114
V.9 Significance of Difference of STEP Scores for Public Fourth Grade Pupils - Classified as "Talented," Class of 1964-65	116
V.10 Significance of Difference of STEP Scores for Public Eighth Grade Pupils - Classified as "Talented," Class of 1968-69	116
V.11 Significance of Difference of STEP Scores for Public Fourth Grade Pupils - Classified as "Talented," Class of 1965-66	118
V.12 Significance of Difference of STEP Scores for Public Seventh Grade Pupils - Classified as "Talented," Class of 1968-69	118
V.13 Significance of Difference of STEP Scores for Catholic Fourth Grade Pupils - Classified as "Superior," Class of 1964-65	120
V.14 Significance of Difference of STEP Scores for Catholic Eighth Grade Pupils - Classified as "Superior," Class of 1968-69	120
V.15 Significance of Difference of STEP Scores for Catholic Fourth Grade Pupils - Classified as "Superior," Class of 1965-66	122
V.16 Significance of Difference of STEP Scores for Catholic Seventh Grade Pupils - Classified as "Superior," Class of 1968-69	122
V.17 Significance of Difference of STEP Scores for Catholic Fourth Grade Pupils - Classified as "Very Talented," Class of 1964-65	124

V.18	Significance of Difference of STEP Scores for Catholic Eighth Grade Pupils - Classified as "Very Talented," Class of 1968-69	124
V.19	Significance of Difference of STEP Scores for Catholic Fourth Grade Pupils - Classified as "Very Talented," Class of 1965-66	126
V.20	Significance of Difference of STEP Scores for Catholic Seventh Grade Pupils - Classified as "Very Talented," Class of 1968-69	126
V.21	Significance of Difference of STEP Scores for Catholic Fourth Grade Pupils - Classified as "Talented," Class of 1965-66	128
V.22	Significance of Difference of STEP Scores for Catholic Seventh Grade Pupils - Classified as "Talented," Class of 1968-69	128

FIGURES

V.1	Mean for STEP Test for Public Eighth Grade Pupils Classified as "Superior" - Class of 1964-65	109
V.2	Means for STEP Test for Public Seventh Grade Pupils Classified as "Superior" - Class of 1965-66	111
V.3	Means for STEP Tests for Public Eighth Grade Pupils Classified as "Very Talented" - Class of 1964-65	113
V.4	Means for STEP Tests for Public Seventh Grade Pupils Classified as "Very Talented" - Class of 1965-66	115
V.5	Means for STEP Tests for Public Eighth Grade Pupils Classified as "Talented" - Class of 1964-65	117
V.6	Means for STEP Tests for Public Seventh Grade Pupils Classified as "Talented" - Class of 1965-66	119
V.7	Means for STEP Tests for Catholic Eighth Grade Pupils Classified as "Superior" - Class of 1964-65	121
V.8	Means for STEP Tests for Catholic Seventh Grade Pupils Classified as "Superior" - Class of 1965-66	123
V.9	Means for STEP Tests for Catholic Eighth Grade Pupils Classified as "Very Talented" - Class of 1964-65	125
V.10	Means for STEP Tests for Catholic Seventh Grade Pupils Classified as "Very Talented" - Class of 1965-66	127
V.11	Means for STEP Tests for Catholic Seventh Grade Pupils Classified as "Talented" - Class of 1965-66	129
V.12-b	Means of Public Seventh Grade Class STEP Scores Plotted by Grade, Class of 1965-66	130-31
V.13-b	Means of STEP Scores for Catholic Eighth Grade Class by Grade, Class of 1964-65	131-32
V.14-b	Means of STEP Scores for Catholic Seventh Grade Class by Grade, Class of 1965-66	133-34

APPENDIX "C"

TABLES

Table		Page
VI.1	Teacher Rating Scale Means of Eighth and Seventh Grade Classes in 1967-68	136
VI.2	Teacher Initiated Statements from Anecdotal Records of Eighth and Seventh Grade Classes, 1967-68 in "Creativity"	137
VI.3	Teacher Initiated Statements from Anecdotal Records of Eighth and Seventh Grade Classes, 1967-68 in "Intellectual Curiosity"	138-39
VI.4	Teacher Initiated Statements from Anecdotal Records of Eighth and Seventh Grade Classes, 1967-68 in "Analytical Reasoning"	140
VI.5	Teacher Initiated Statements from Anecdotal Records of Eighth and Seventh Grade Classes in 1967-68 on "Development of Interests"	141
VI.6	Teacher Initiated Statements from Anecdotal Records of Eighth and Seventh Grade Classes in 1967-68 on "Self-Direction in Learning"	142
VI.7	Teacher Initiated Statements from Anecdotal Records of Eighth and Seventh Grade Classes in 1967-68 on "Social Concern"	143

APPENDIX "D"

TABLES

Table		Page
VII.1	Seventh Grade Pupils' Favorite Recreations, 1967-68	146
VII.2	Sixth Grade Pupils' Favorite Recreation, 1967-68	146
VII.3	Leisure Activities of Pupils, Class of 1964-65	147
VII.4	Leisure Activities of Pupils, Class of 1965-66	147
VII.5	Seventh Grade Pupils' Favorite T.V. Programs, Class of 1964-65	148
VII.6	Sixth Grade Pupils' Favorite T.V. Programs, Class of 1965-66	148
VII.7	Parts of Newspaper Read by Seventh Grade Pupils, 1967-68	149
VII.8	Parts of Newspaper Read by Sixth Grade Pupils, 1967-68	149
VII.9	Seventh Grade Pupils' Favorite Magazines, 1967-68	150
VII.10	Sixth Grade Pupils' Favorite Magazines, 1967-68	150
VII.11	Books Read by Seventh Grade Pupils, 1967-68	151

VII.12	Books Read by Sixth Grade Pupils, 1967-68	151
VII.13	Seventh Grade Pupils' Outside School Activities, 1967-68	152
VII.14	Sixth Grade Pupils' Outside School Activities, 1967-68	152
VII.15	Seventh Grade Pupils' Activities in Sports, 1967-68	153
VII.16	Sixth Grade Pupils' Activities in Sports, 1967-68	153
VII.17	Seventh Grade Pupils' Hobbies, 1967-68	154
VII.18	Sixth Grade Pupils' Hobbies, 1967-68	154
VII.19	Seventh Grade Pupils' Educational Ambitions, 1967-68	155
VII.20	Sixth Grade Pupils' Educational Ambitions, 1967-68	155
VII.21	Seventh Grade Pupils' Vocational Ambitions, 1967-68	156
VII.22	Sixth Grade Pupils' Vocational Ambitions, 1967-68	156
VII.23	Vocational Choices of Parents for Seventh Grade Pupils, 1967-68	157
VII.24	Vocational Choices of Parents for Sixth Grade Pupils, 1967-68	157
VII.25	Opinions from Essays "How I Have Changed" by Public Program Pupils	158
VII.26	Opinions from Essays "How I Have Changed" by Catholic Program Pupils	159
VII.27	Opinions from Essays "How I Have Changed" by Public Comparison Pupils	160
VII.28	Opinions from Essays "How I Have Changed" by Catholic Comparison Pupils	161
VII.29	Pupils' Ideas on "How I Would Like to be Changed" Class of 1964-65	162
VII.30	Pupils' Ideas on "How I Would Like to be Changed" Class of 1965-66	162
VII.31	Ideas on "How I Would Like to be Changed" by Pupils Classified as "Superior" - Class of 1964-65	163
VII.32	Ideas on "How I Would Like to be Changed" by Pupils Classified as "Superior" - Class of 1965-66	163
VII.33	Ideas on "How I Would Like to be Changed" by Pupils Classified as "Very Talented" - Class of 1964-65	164
VII.34	Ideas on "How I Would Like to be Changed" by Pupils Classified as "Very Talented" - Class of 1965-66	164
VII.35	Ideas on "How I Would Like to be Changed" by Pupils Classified as "Talented" - Class of 1964-65	165
VII.36	Ideas on "How I Would Like to be Changed" by Pupils Classified as "Talented" - Class of 1965-66	165
VII.37	Most Wanted Wish of Pupils, Class of 1964-65	166

VII.38 Most Wanted Wish of Pupils, Class of 1965-66 166

VII.39 Pupils' Comments About "The Best Thing That Happened to Me" - Class of 1964-65 167

VII.40 Pupils' Comments about "The Best Thing That Happened to Me" - Class of 1965-66 167

VII.41 Pupils' Comments on "The Worst Thing That Happened to Me" - Class of 1964-65 168

VII.42 Pupils' Comments on "The Worst Thing That Happened to Me" - Class of 1965-66 168

VII.43 Greatest Likes of Pupils, Class of 1964-65 169

VII.44 Greatest Likes of Pupils, Class of 1965-66 169

VII.45 Greatest Dislikes of Pupils, Class of 1964-65 170

VII.46 Greatest Dislikes of Pupils, Class of 1965-66 170

APPENDIX "E"

TABLES

Table	Page
VIII.1 Parent Responses Concerning Continuation of the Program	172

CHAPTER I

INTRODUCTION

If all children could learn equally well there would have been no reason to conduct the study described in this volume. Schools could continue to place children in classes randomly, by first letters of their last names, or by administratively convenient procedures, and assume that the pupils' needs would be met. But children do vary in learning competency. In all schools there are readily identifiable youngsters who vary significantly from the usual in the rate and quality of learning; and their random placement in classes must mean that many would be offered unequal opportunities for growth and development. Slow learners would be expected to reach levels which they could not possibly attain, and would, therefore, be deprived of the opportunity to achieve that which they might have accomplished if the pace had been more suitable. And the faster learners would not be encouraged to work at the higher levels of which they are capable.

Three school procedures, all with minor modifications, have been commonly employed to provide for the needs of children in the latter category. They may be described in general terms as: acceleration, in which the child moves through a school program in fewer than the usual number of years; individualized enrichment, a procedure whereby the student remains in a regular classroom for the usual length of time but is encouraged to work at higher levels, in greater depth, or in more breadth than the other children; grouping, in which children who show superior promise are placed in special classes composed of contemporaries who show similar promise. The study reported in this volume was not concerned with the first of the three options. Both the second and third procedures are represented, however, since the study was designed to determine if any significant differences appeared in the growth and development of fast learners (referred to throughout this volume as gifted children) who were grouped, and similar subjects named hereafter the comparison group, who were placed in regular classes (and presumably given some enrichment) during their period of attendance in the middle and upper grades of public and Catholic schools in two mid-western cities.

Insofar as it is ever possible to do so in studies in which human beings are the subjects, an attempt was made to use scientific methods. In many ways, however, it is impossible to apply them in the way it is done in the physical and biological sciences. The fact that children are in school only one-fifth or less of their waking hours means that many factors other than school experiences may influence their behavior, and the experimenter cannot maintain the controls that the scientist employs. In the use of a comparison group (ungrouped gifted children), it was necessary to make the assumption that out-of-school experiences would be similar for all of the subjects,—a hazardous assumption in view of what is known about differences in behavior of free persons in a free society. It was essential that data obtained by reports of parents, teachers, and the pupils themselves be employed; and since they involve attitudes and personal values, there must always be some doubts about the validity of such reports. Since there are no adequate instruments for the measurement of higher learning processes of elementary school children, the measurements of mental performances could not be as sharp as a pure scientist would demand. The use of the comparison group procedure implied that reasonably similar pupils would appear in the grouped and ungrouped classes, and strenuous efforts were made to insure such reasonable similarity. No one could be absolutely sure, however, that the children in the groups were similar in any respect other than in the limited number of measurements that were employed in their identification. They were alike in Stanford Binet scores, sex, and socio-economic status of their families, but whether they were alike in numerous other characteristics there was simply no way of knowing. When such matters as the above are considered, there is good reason to suggest that the study reported in this volume is not a truly scientific study in the sense that the physical and biological scientists use that term. The investigators, fully aware of the limitations of their study, must make them known to their readers. They can only present their findings, state their conclusions, draw their implications, and encourage the reader to decide whether the judgments are warranted. This procedure is the one that has been followed in this volume. There is no absolutely conclusive evidence in this report that grouping of gifted children results in generally better performance in all areas than does the practice of retaining them in regular classes. There is presentation of evidence and interpretation of it to the effect that it is a productive procedure. The reader is invited to examine the evidence and to draw his own conclusions.

Regardless, however, of the reader's interpretation of the evidence presented, he must find, in the design and the procedures employed, great concern for the fullest development of the pupils in the study and for all gifted children. Basic to the study was the belief that the children themselves, and society ultimately, would suffer irreparable loss if the talents displayed by the gifted children were not fully employed and new potentials were not

developed. It seems likely that gifted persons are likely to have a richer and more satisfying life as children and as adults if they can be helped to make best use of their talents, and it seems certain that no society can flourish, perhaps not even survive, unless its brain power can be fully developed.

Much of the argument for special efforts on behalf of the gifted has been based upon their potential contribution to society. It is often said that these are the persons who will write our great poetry, prose, and music; make our important scientific discoveries; paint our remarkable pictures; lead us in the solving of domestic crises; lead in the development of industrial enterprise; and perhaps even find a way by which nations can settle their disputes without going to war. The history of societies suggests that, except in the last category, such contributions have been made by gifted persons whose giftedness must have been recognized when they were children. At the same time it seems likely that they, and many others not identified and given special consideration, might have accomplished more if they had been recognized earlier and educated more effectively. The rewards to society appear to be so priceless that it seems inconceivable that miserly cost accounting has been such a deterrent to the development of effective programs for the gifted. No society can afford to place such programs low on its list of priorities.

But whether or not one accepts the argument that society is likely to benefit from special offerings for gifted children one cannot escape consideration of their impact on persons. It has been argued that special attention to gifted students will result in unfortunate personal characteristics such as rejection of the child by his peers, tendencies toward the development of braggadocio, lack of concern for others, emotional maladjustments, and a generally unwholesome growth in personality. There is no incontrovertible evidence that the possibility of great service to society needs to be obtained at the expense of unfortunate personal development, but despite that fact, the belief that the children will suffer in personal development has retarded the growth of special programs for the gifted.

Still another factor that has influenced the placing of low priorities on such programs has been the belief that special provisions for the handicapped should take precedence over those for any other group. Never at any time in the study reported in this volume has it been suggested that the special offerings for the gifted would require neglect of the handicapped. In a country as bountiful as the United States, all the children—the handicapped, normals, underprivileged, and the disadvantaged—can be offered the kinds of programs from which they seem most likely to profit. Basic to the investigators and supporters of this study was the belief that provision for the gifted would not require any lessening of efforts to provide adequately for those children who were not so classified. But, basic too, was the belief that society and the individuals concerned might profit more, in proportion to the efforts expended, from making special provisions for the gifted.

CASE STUDIES

Much statistical evidence about the outcomes of this study is presented in later chapters. The figures produce important generalizations, but in the process of generalization, the individuals get lost in the mass of data. In order to prevent that loss the investigators present the following four case studies. Teachers in the program were asked to submit names of pupils who fitted into the following categories:

- (a) Bob, a successful leader.
- (b) Bertha, a superior performer.
- (c) Jane, a student who scored very high on an intelligence test (I.Q. of 166)
- (d) John, a boy with many interests.

The investigators selected one student from the list in each of the categories listed above as a subject for a case study. All the cumulative records of each of these pupils were studied intensively before the cases were written and attempts were made to weave from the many parts a comprehensive picture of the pupil. It is hoped that the presentation of the case studies to the reader before he begins to study the evidence about the development of the children in each of the separate categories will emphasize both the breadth and longitudinal nature of the data and the fact that the study was concerned about the development of persons.

CASE STUDY

BOB

Reports by teachers and parents throughout the four years in which Bob was in the fourth, fifth, sixth, and seventh grades of the gifted program, leaves no doubt that he was a leader in the classroom, on the playground, and in his neighborhood. Some of the reports suggest that he was "bossy," others that he was a "natural leader," a "great organizer," and one who could get along with others, "as long as he can give the orders." Before entering the program he was said to be intolerant of others' mistakes, and during his first months as a fourth grader in the program he still resented the procedure of giving all pupils their turn at an activity because he said they were "too dumb." When the principal discussed the matter with him, he became aware of the other pupils capabilities and worked so well from that time on he was described as the best leader among his 50 classmates. He became an effective student representative to the student council and contributed much to his classes.

Bob liked the gifted program classes. He enjoyed the challenge so much that he became an enthusiastic participant in, and volunteer for, many class activities. He brought materials and books to school. He went beyond the minimum assignments to the extent that one teacher said that if she asked Bob for ten of anything, he always came up with more. It had been reported that before he came into the gifted program he had been a trouble-maker, especially when the work was repetitive. While he was in it, however, teachers used words such as "eager," "responsive," "mature," "a good reasoner," and a "conscientious student" to describe him. Although some of his marks were reduced by too hasty work, impatience with busy work, and (in the earlier years) inadequate checking of his work, he received twenty-five A grades and eighteen B grades in academic work over the four year period. This record kept him on the honor roll even in highly competitive classes. He did extra reading, carried on a special project with white mice, collected stamps, and contributed many suggestions to his classes. His skill in writing is revealed in the following unedited essay written when he was in the seventh grade.

LIFE IN THE TWENTY-FIRST CENTURY

Life in the 21st century will be run mostly by machines. The houses of the age will probably be made of glass, with modern sliding furniture. The kitchen will be run by machines triggered by buttons. A robot will be your maid instead of a person. Your beds will be a circular object set in the floor. In the morning you push a button, the bed goes down, and your clothes come up.

Jobs will be much easier. The worker will only have to program computers or push buttons, or think. Teaching will be run by a television screen with a supervisor in the room.

People will travel either in little jet cars sliding on a track or by flying. Flying will be controlled by computers and the planes will be piloted by robot computers.

Their clothes will be made of a synthetic which is comfortable and looks nice but is really a plastic which resists all precipitation.

People will have to get plenty of exercise to compensate for the lack of energy needed in their work. They will probably have a gym in each house full of exercising materials. One will probably be track moving around in circles. You just have to push a button, hop on and run, but never go more than a yard. Television will still be here, but even more so. Instead of only one in the house, they'll be in every room! Other forms of recreation such as football, basketball, etc., will probably exist in the same forms.

People of that age will be eating synthetic foods which taste good and have enough vitamins for a whole day and then some.

Bob worked diligently on tests and performed at a very high level. On general mental tests he scored in upper two percent of children of his age and above the ninetieth percentile in twenty-one of the twenty-two subsections of the Sequential Tests of Educational Progress which he took over the four-year period. Fifteen of his scores on the tests were in the upper five percent of those made by students of his grade level nationally. Other test scores placed him well beyond the Peoria averages for his grade. He scored near the average for the students in the gifted program on tests in German, and well above it in economics. His keen interest in science and mathematics was indicated by test scores usually in the top one or two percent of students of his grade. When he spoke of the future, he said he wanted to be a college science teacher or a chemical engineer.

Bob was described as well-liked for both his physical and academic achievements. He was said to be better at sports than children two years older. He did competitive swimming, played football and basketball with enthus-

iasm, read about sports in the newspapers after a quick glance at the front page, watched sport events on TV, and went with his parents to college basketball games. Big for his age, with minor colds as his only health problem, he gave his hundred percent to any sport activity and wanted all his friends to give as much.

Bob made friends easily and his transfer to the gifted program brought no problems in adjustment. When asked to list his friends in the fifth grade, he named twelve, two of whom were in his gifted class. When he was in the fifth and sixth grades, he listed twenty-six and nineteen friends respectively including several in his class. At times during the early years his disruptive tendency to speak out so much without giving others a chance was very disturbing to the other children, but later reports suggests that he improved in this respect as he matured in the program, most of his friends were neighborhood boys and girls. After his transfer to the special class, his friendships increased both at school and at home.

Bob's parents were both college graduates who were concerned about the progress of their four children. Although the father's professional work required him to be absent from the home frequently and the mother's part-time employment required some time away from the family, it appears that they tried to carry on many activities with the children. The family took trips together, attended sports events, and provided special opportunities such as art lessons for Bob. The parents generally showed considerable concern for the welfare of the children and their comments about Bob, obtained separately from mother and father, suggested that they had observed him well. They attributed his "bossiness" in school to the tendency of his two brothers, four and three years older, to give him a "hard time" at home. They described his love of competition, his quick comprehension, his "early and good physical coordination," his love of being with others, his outgoing nature, his many friends at school and in the neighborhood, his complete concentration in games, and his effectiveness in doing the few chores he was required to do at home. They thought that he would certainly go to college after which they hoped he would become a highly respected contributor to society as a politician or a teacher. They were both pleased with the gifted program.

The four year picture of Bob's development suggests that he has profited significantly from participation in the gifted program. Tests and marks indicate that in his acquisition of knowledge he has advanced far beyond most pupils of his age. In addition he has achieved considerable skill in the use of a foreign language. A strong desire to learn has been amplified, leadership potential has developed, and the pleasure of working and playing with classmates and other friends has increased. Next steps in his development toward what appears to be a promising future will be watched with interest.

CASE STUDY

BERTHA

When Bertha was recommended for participation in the Gifted Child Program, she was described by her teacher as socially confident, wholesome, eager, and as one who had a very good memory. Testing for admission to the Program resulted in an individual intelligence test score that placed her in the upper three percent of children her age. Her four-year record in the Program suggests that the selection was a fortunate one.

Bertha loves to learn. She said that the biggest event of her life was the transfer to the Program where she could learn more. She read *Macbeth* while a fourth grader and said it helped her in her hobby of collecting "big words." She taught her younger brother to read so that he too was said to be reading fourth grade books while he was a first grader. She read the newspaper regularly and described the front page as "most exciting." As time went on, her parents said that she read fewer library books so that she would have more time for her projects and the homework she liked to do. Initially, she had some difficulties with spelling, but she worked hard on overcoming her problems and showed much improvement over the years. On sixteen sub-tests of the Sequential Tests of Educational Progress taken over the past four years, only one was below the ninetieth percentile, twelve were above the ninety-fifth; and in five of them she scored in the top one percent of students her age. She was much more interested in verbal than in quantitative areas, but could achieve at very high levels in both. She was three years ahead of the Peoria norms for her grade on local achievement tests given to all Peoria pupils. All of her marks in all subjects were at the A level. She was said to be excellent in creative writing.

Bertha's superior school achievements were not attained at the expense of social adjustment. It was reported that in her early school years there had been some difficulties in getting along with classmates, and the word "snob" had been used in describing her. Her seventh grade teachers said that she had developed from that stage to one of considerable humility in self-description. Some teachers said that the boys called her a "Good Joe" even though she frequently beat them on tests, that she made friends easily, that she was well liked, and that she had no

adjustment problems. She was chosen as a friend by ten classmates when she was a sixth grader and was elected president of her class twice and vice-president and patrol captain. Her seventh grade teachers reported that she was becoming increasingly "social-minded." She was getting more concerned about her appearance and about going to parties. She said her friends would describe her as fun-loving and understanding.

Outside of school Bertha was a busy girl. She made collections of butterflies, stamps, coins, rocks, shells, and books. She was a swimmer on a country club team and played golf at every opportunity. She took lessons in dancing, piano, and swimming, joined the Girl Scouts, went on several trips with her family and indicated that she never lacked activities. "I can always think of screwy things to do."

Bertha's energy and activities did not always please her mother, who indicated in a parent-teacher conference that she thought that Bertha took her work too seriously. In reporting on their aims for their daughter, her parents listed as top priorities good judgment, imagination, being considerate of the opinion of others, choosing friends who have a sense of humor, and learning not to take life too seriously. There is no mention of this too serious side of Bertha in teachers' reports, and it does not seem characteristic of her behavior at school. Whether Bertha acted quite differently at home than she did at school or whether the parents used different standards of appraisal in this matter cannot be established at this time.

All the evidence collected at school and by university investigators suggests that Bertha was a leader. It was indicated that her enthusiasm carried her over any obstacle. One teacher said, "At times when her ideas are thwarted by other pupils, she becomes a little moody until she accepts her fate." She was said to have great organizational ability, that she could keep "rambling" students on the topic under discussion, and was "outstandingly creative" in her leadership. She could be depended upon to encourage others to work with her in getting a job done.

It appears that Bertha's potentialities are best realized when she has to meet the challenges presented by others who have many talents. It seems that she is concerned about the welfare of those with lesser possibilities, and that concern will probably be exhibited in her work as an organizer and leader. If she is challenged as well in her future school work as she has been during the past four years, significant contributions seem likely.

CASE STUDY

JANE

Jane was a very bright and very able child. She was a highly self-directed, self-disciplined pupil, seen by her teachers as applying herself well to any task. Very early she was seen by her parents as doing most things easily and well. This ability was quickly recognized by the school she first attended, and after about two months in the first grade, she was accelerated into the second. The promotion seems not to have handicapped her in any way, and though a year younger than her peers, she has been liked by her peers and has achieved exceptionally well in school. She was readily identified as a candidate for the special class program for academically able students, and has earned a place on the school Honor Roll for the quality of her accomplishments in it. She wants to go to college and should do a fine job at that level as well. Along with her high intelligence she was quite concerned about the equality of persons too. She was an outgoing child, made friends easily with both boys and girls, and enjoyed a high level of social acceptance by her classmates. Expressions of this social adjustment are her past elections as class secretary and class president. Teachers and classmates alike saw her as a delight to have in a class and as a consistently interesting contributor to most anything in which they were involved.

Away from school, Jane was a member of a closely knit family group that was pleased with her school achievements and warmly supportive of her efforts. She was an avid reader and was usually found with a book when she had nothing else she had to do. Still she found time to collect rocks, to take pictures and mount them, and to sew and knit in some of her free time. She also found time to study piano and to be active in the Indian Princesses and Girl Scouts organizations. There were so many things she would have liked to do that her parents had to guard her against her tendencies to be a "night person." For in addition to the above there was still her desire to read the newspaper daily, to keep herself informed, and to watch some T.V., especially shows about animals. Her family expected her to do a share of the usual household chores which a girl her age would be expected to assume.

She enjoyed her family, though admittedly she grew weary of her little brother occasionally. Still, going to the park, playing croquet, and swimming with her family, loomed high on the list of things Jane like to do.

Perhaps most fortunately of all, Jane liked and readily accepted herself as she was. She realized that she was an able child. She wanted to do well; she was chagrined when she did not and tried the harder for it. Given a chance to talk about her attitude, Jane said there was just nothing she would try to change about herself.

CASE STUDY

JOHN

John was a bright, demanding child. As one of his teachers put it, he was "a paradox of delightful and exasperating capacities." He was a highly verbal youngster who wrote well, but told stories better. He read a very great deal so that he had a vast background to draw on for his "story-telling" endeavors. His teachers saw him as a very fine pupil who completed his assignments well. His priority interests were in science, ancient history, and mythology. The science interest spilled over into out-of-school collections of minerals and fossils. John said he would like to pursue his interest in mineralogy in college.

His potential manifested itself early to his family, and his inquiring mind caused him to keep after his parents to read to him constantly. Over the years he developed a great deal of confidence in his ability, and he did not back down easily and readily from positions he took. His teachers described him from time to time as aggressive, strong-willed, and not tolerant of the ideas of others. In fact, his personal confidence in his ability made him much at ease with his teachers and an unhesitating corrector of them when he thought they were wrong.

His social position in his peer group was better than one might expect from the description given above. His tendency to seek out only his intellectual equals narrowed his friendship circle to some extent. His tendency to take leadership roles so readily resulted at times in his classmates choosing others to lead them as a way of curbing his activity. Still his general social acceptance in the group was high.

John's family was pleased with his work in school and came to realize that he was a much more able child than his older siblings. They felt that his interests in school had increased as a result of his participation in the special class program. They hoped that he would go on to college, something neither his mother or father did.

The case studies presented above were designed to offer a portrayal of the kinds of pupils who were placed in special classes for the gifted during the period of the experiment. In the following chapter the school setting of the gifted classes and the methods of selecting pupils for the program and comparisons (ungrouped) are described. A composite picture of a typical fourth grade pupil entering the program as revealed by tests scores, reports of observations by parents and by the pupils themselves, completes the chapter.

CHAPTER II

THE SCHOOLS

As will be discussed later in the chapter, comparison groups were selected from the schools of Rockford, Illinois. In order to present a picture of Peoria and Rockford and their school systems, the following data are significant:

	<u>Peoria</u>	<u>Rockford</u>
Population	139,000	134,000
Area	39 sq. miles	32 sq. miles
Valuation	\$650,000,000	\$670,000,000
Public Schools	54	53
Pupils	27,125	26,817
Catholic Schools	12	13
Pupils	6,356	6,985

Both cities are industrial communities and each is the center of a large trading area. Each community has an institution of higher learning; Rockford, a four year liberal arts college (Rockford College), and Peoria a university with a graduate program leading to the master's degree (Bradley University).

SELECTION OF PUPILS FOR THE GIFTED PROGRAM

The identification of pupils eligible for enrollment in the Gifted Child Program was accomplished as follows:

- Step 1. Third grade classroom teachers in both the public and Catholic schools were asked to nominate pupils in their classes who they felt gave evidence of being academically talented. In so doing, they examined:
- a. Otis-Alpha group intelligence test scores.
 - b. Stanford Achievement test scores in reading.
 - c. Grades earned in the first semester of third grade.

In addition to the above items, the teachers were expected to use individual judgment. To aid the teachers in these evaluations, and as further auxiliary data, an unpublished check list for identifying the characteristics of gifted children was used.

- Step 2. The records of pupils nominated by their teachers were checked by the building principal to insure that nominees had:
- a. An Otis score of at least 130.
 - b. A reading score advanced by at least two grade levels.
 - c. Grades of A and B in their third grade work.

The principals' judgments of the pupils were added to the classroom teacher's judgments of the children's abilities and anticipated success in the gifted program.

- Step 3. Lists of nominees were sent from each public elementary school to the Director of Elementary Education in Peoria and from each Catholic elementary school to the Office of the Superintendent of the Catholic schools. They were then transmitted to the Gifted Child Program Office, College of Education, Bradley University, for review and action.
- Step 4. Parents of nominees were contacted and asked to permit administration of the Stanford-Binet Intelligence Test to their children. This testing took place in the early spring at the Bradley University's Educational Diagnostic Center or at the schools.

- Step 5. The parents of all children were notified of the eligibility of their child for the program. Parents of pupils who achieved a score of 130 or higher on the Stanford-Binet test were invited to enroll their child in the special program. Some children whose test scores were somewhat below 130, but whose records in school were exceptionally strong, were given provisional admission. Others were informed that their children had not met the entrance criteria for the program.

Although the above procedures were used each year for five consecutive years to start new fourth grade classes, this report is developed on the basis of data derived from two class groups, namely, the fourth grades formed in the autumn of 1964-65 and of 1965-66. This procedure made it possible to report on the progress of children while they were in grades 4 to 8. Tables 2.1 through 2.4 show the number of children nominated for testing and the results of the testing done at that time.

TABLE 2.1* PUBLIC SCHOOL THIRD GRADE PUPILS NOMINATED FOR
STANFORD-BINET TESTING
Spring 1964

Classification	Number of pupils nominated	Percent of all third graders	Number meeting criteria	Number accepted	Percent of all tested
Boys	37	4.9	30	25	65.6
Girls	48	6.9	34	20	41.7
Total	85	5.9	64	45	52.9

* Throughout this volume the first number indicates the chapter number and the second indicates the order of the appearance of the table in the chapter.

TABLE 2.2 CATHOLIC SCHOOL THIRD GRADE PUPILS NOMINATED FOR
STANFORD-BINET TESTING
Spring 1964

Classification	Number of pupils nominated	Percent of all third graders	Number meeting criteria	Number accepted	Percent of all tested
Boys	59	13.5	32	30	50.8
Girls	51	10.0	13	13	25.5
Total	110	11.8	45	43	39.1

TABLE 2.3 PUBLIC SCHOOL THIRD GRADE PUPILS NOMINATED FOR
STANFORD-BINET TESTING
Spring 1965

Classification	Number of pupils nominated	Percent of all third graders	Number meeting criteria	Number accepted	Percent of all tested
Boys	66	6.3	30	27	40.9
Girls	68	7.8	35	29	42.6
Total	134	7.1	65	56	41.8

TABLE 2.4 CATHOLIC SCHOOL THIRD GRADE PUPILS NOMINATED FOR
STANFORD-BINET TESTING
Spring 1965

Classification	Number of pupils nominated	Percent of all third graders	Number meeting criteria	Number accepted	Percent of all tested
Boys	34	6.3	23	22	64.7
Girls	39	8.8	21	19	48.7
Total	73	7.4	44	41	56.1

The data in Tables 2.5 through 2.9 show the I.Q., reading, and grade distribution scores for the total group of public and Catholic school pupils accepted in the program for 1964-65 and 1965-66.

TABLE 2.5 MARKS OF PROGRAM PUPILS IN THIRD GRADE
Class of 1964-65

GRADES	<u>Percent of each grade</u>					
	A	B	C	A	B	C
Subjects						
Reading	84%	16%	0%	76%	24%	0%
Writing	31	56	13	24	57	19
Spelling	81	16	3	90	5	5
English	53	47	0	62	33	5
Math	50	50	0	67	33	0
Social Studies*	62	38	0	0	100	0
Science	69	31	0	48	52	0
Conduct	60	34	6	0	0	0
Effort	59	41	0	0	0	0
Religion	0	0	0	76	19	5
Phonics	0	0	0	50	50	0
Music	0	0	0	24	52	24
Art	0	0	0	15	70	15
% of Total	60%	37%	3%	53%	40%	7%

* Some schools did not give a grade in social studies

TABLE 2.6

MARKS OF PROGRAM PUPILS IN THIRD GRADE
Class of 1965-66

GRADES	<u>Percent of each grade</u>					
	A	B	C	A	B	C
Subjects						
Reading	74%	26%	0%	59%	41%	0%
Writing	36	41	23	28	48	24
Spelling	82	18	0	97	3	0
English	80	20	0	69	28	3
Math	53	43	4	55	38	7
Social Studies*	66	15	19	100	0	0
Science	68	30	2	21	58	21
Conduct	38	62	0	0	0	0
Effort	68	32	0	0	0	0
Religion	0	0	0	48	42	10
Phonics	0	0	0	67	33	0
Music	0	0	0	26	53	21
Art	0	0	0	11	61	28
% of Total	63%	31%	6%	46%	41%	13%

* Some schools did not give a grade in social studies.

TABLE 2.7

METROPOLITAN READING ACHIEVEMENT TEST SCORES

Percentile Scores Class of:	<u>Public</u>		<u>Catholic</u>	
	1964-65	1965-66	1964-65	1965-66
95 - 99	18	26	18	20
90 - 94	6	3	6	3
85 - 89	2	1	4	0
80 - 84	2	1	1	0
75 - 79	1	0	0	0
70 - 74	3	0	0	0
65 - 69	0	1	0	0
60 - 64	1	0	1	0
55 - 59	1	0	0	0
50 - 54	0	0	0	0
45 - 49	0	1	0	0
40 - 44	0	1	0	0
No test scores available	5	13	2	9
Total	39	47	32	32

TABLE 2.8

OTIS ALPHA I.Q. SCORES OF PROGRAM PUPILS

Scores Class of:	<u>Public</u>		<u>Catholic</u>	
	1964-65	1965-66	1964-65	1965-66
150 - 154	0	0	0	2
145 - 149	3	2	5	2
140 - 144	3	4	2	4
135 - 139	5	9	3	5
130 - 134	12	10	5	2
125 - 129	3	10	13	6
120 - 124	4	5	2	4
115 - 119	4	1	2	0
110 - 114	2	2	0	0
105 - 109	1	0	0	0
100 - 104	0	1	0	0
95 - 99	0	1	0	0
No test scores available	2	2	0	7
Total	39	47	32	32

TABLE 2.9

STANFORD-BINET TEST SCORES FOR PROGRAM PUPILS

Stanford-Binet Classification I.Q. Scores	Class:	<u>Public</u>		<u>Catholic</u>	
		1964-65	1965-66	1964-65	1965-66
165 - 169		1	0	1*	0
160 - 164		0	1	0	0
155 - 159		4	1	1**	0
150 - 154		0	0	2	3
145 - 149		4	4	4	2
140 - 144		6	8	5	2
135 - 139		9	7	15	8
130 - 134		8	9	3	12
125 - 129		5	13	1	4
120 - 124		1	4	0	1
115 - 119		0	0	0	0
110 - 114		1	0	0	0
Total		39	47	32	32

* Retested on WISC S-B 169, WISC 138

**Retested on S-B 157, WISC 125.

In some cases, the tester using the Stanford-Binet Intelligence Test felt that the performance of a pupil did not indicate his true score and requested a second test using the Wechsler Intelligence Scale for Children. Table 2.10 shows the scores on the two tests.

TABLE 2.10 QUOTIENTS OF PUPILS RE-TESTED WITH THE WECHSLER INTELLIGENCE SCALE FOR CHILDREN

Class:	<u>Public</u>				<u>Catholic</u>			
	S-B 1964-65	WISC	S-B 1965-66	WISC	S-B 1964-65	WISC	S-B 1965-66	WISC
	157	133	129	113	141	121	123	126
	149	128	121	118	157	125	138	130
	114	124	126	118	127	137	127	119
	132	124	127	109	169	138	138	114
			125	114	135	133		
			126	118	132	129		
					136	135		
					149	123		
Mean	138	127	126	115	143	130	132	122

After choosing the pupils for the special classes, the parents were invited to attend a meeting to discuss the program. In some instances, the parents did not feel that they wanted their child to participate in the program.

The selection process described on the preceding pages resulted in the choice of seventy-one pupils for the 1964-65 and seventy-nine for the 1965-66 school years. The following pages contain descriptions of those pupils.

Academic Performance

One month after the pupils had been placed in the special classes, the Sequential Test of Educational Progress, hereafter referred to as STEP, was administered. This test was selected because the items generally required more thought and less rote memory than items on most achievement tests used at these grade levels.

Study of Tables 2.11 and 2.12 which follow reveals that the pupils selected for the program had achieved well above the national averages for pupils of their grade level. When the average scores reported in the table are converted to percentiles, it was found that the average of the scores of pupils accepted for the program placed them in all subject areas in at least the upper ten percent of fourth grade pupils in the country. In most subject-fields they scored well within the upper five percent. In terms of skill in solving new problems on the basis of information learned, the selection process had provided groups of pupils who could be truly described as academically talented.

TABLE 2.11 PUBLIC PROGRAM PUPILS' CONVERTED SCORES AND NATIONAL NORMS

Classification	National Mean* <u>fourth grade</u>		Class: Mean	1964-65 %ile rank	<u>fourth grade</u>		1965-66 %ile rank	S.D.
	Mean	%ile rank			S.D.	Mean		
1	2	3	4	5	6	7	8	9
Test								
Math . . .	238	62	255	97	9.3	253	95	8.5
Science . .	243	48	262	94	7.2	257	83	9.9
Writing . .	242	52	259	89	11.7	259	89	14.6
Reading . .	244	56	269	94	11.3	264	92	13.4
Social Studies .	240	57	256	94	6.7	253	90	8.1

* Source: Educational Testing Service, Princeton, New Jersey
"STEP Technical Report Book" 1957.

The national means are not based on "gifted" programs, but on random samples.

TABLE 2.12 CATHOLIC PROGRAM PUPILS' CONVERTED SCORES AND NATIONAL NORMS

Classification	National Mean* fourth grade		Class: Mean	1964-65 %ile rank	fourth grade		1965-66 %ile rank	S.D.
	Mean	%ile rank			S.D.	Mean		
1	2	3	4	5	6	7	8	9
Test								
Math . . .	238	62	255	97	10.7	252	95	7.7
Science . .	243	48	261	92	8.4	263	94	4.4
Writing . .	242	52	260	91	11.1	259	89	9.6
Reading . .	244	56	267	93	11.1	270	95	11.1
Social Studies .	240	57	255	93	8.4	254	93	7.3

* Source: Educational Testing Service, Cooperative Test Division, "STEP Technical Report Book." 1957.
The national means are not based on "gifted" programs, but on random samples.

SELECTION OF COMPARISON GROUPS

The design for a longitudinal study of the effects of the special program for academically gifted children involved the identification of gifted pupils against whom the progress of the special class groups could be compared. It was not possible to establish this group adequately in Peoria itself because of the decision of the program committee to enroll all eligible fourth grade pupils in the initial class groups.

It was decided to seek the cooperation of the public and Catholic school systems in another Illinois city of comparable size and socio-economic make-up. The data presented at the beginning of this chapter suggested that Rockford, Illinois, would serve this comparison purpose very well. Both the Rockford public and Catholic school systems were willing to enter into the study with Peoria, and through the course of the project this cooperation left nothing to be desired.

A pool of approximately twice the number of pupils in the Peoria special classes were identified in Rockford on the same basis as the Peoria group. From this pool of pupils in Rockford public and Catholic schools, pupils were selected to match pupils in the Peoria program. After pupils were matched to get comparable groups, no further comparisons of individuals were made.

In order to obtain comparable program and comparison groups, pupils from the comparison pool in Rockford who had scores or ratings within given limits of those in the program were chosen. The factors used for matching were I.Q. scores, sex, Hollingshead socio-economic classification ratings, and scores on the STEP Reading and Mathematics tests. Because of the limitations imposed by the size of the pool, it was impossible to match all pupils on all the criteria. The following indicated the standards used in matching.

Criteria	Match I	Match II	Match III
I.Q. Score	Within 5 I.Q. Points	Within 5 I.Q. Points	Within 10 I.Q. Points
Sex	Same	Same	Same
Socio-Economic	Within 1 point	Not used	Not used
STEP Math	Within 5 score points	Within 10 score points	Not used
STEP Reading	Within 5 score points	Within 10 score points	Not used

A first match was run with rigorous standards and as many matched pairs selected as possible. The basis for matching was then relaxed slightly and more matches made. A final matching was made with slightly less rigorous standards. The following indicates the percent of matches obtained in each attempt.

Group	Match I	Match II	Match III
Public - Group I	31%	33%	36%
Public - Group II	49	23	28
Catholic - Group I	9	28	63
Catholic - Group II	31	28	41

On the basis of these data it would appear that for roughly a third of the total group (third match), the matches were of lesser equivalency than for the rest. Since both the program and comparison groups were "locked in" to the study and a reduction in the number of matches would have reduced the numbers with which to work, it was decided to accept all matches. A study of the equivalency of the groups was undertaken and the results are reported in Tables 2.13 and 2.14. For all practical purposes the mean and standard deviations are sufficiently similar that the groups may also be considered well-matched on the basis of I.Q. scores.

TABLE 2.13 STANFORD-BINET SCORES OF PROGRAM AND COMPARISON
PUPILS, Class of 1964-65

I.Q. Scores	<u>Public</u>		<u>Catholic</u>	
	Program	Comparison	Program	Comparison
170 - 174	0	0	0	1
165 - 169	1	1	1	0
160 - 164	0	0	0	1
155 - 159	4	2	1	1
150 - 154	0	4	2	0
145 - 149	4	2	4	1
140 - 144	6	6	5	3
135 - 139	9	6	15	6
130 - 134	8	8	3	7
125 - 129	5	8	1	4
120 - 124	1	2	0	5
115 - 119	0	0	0	2
110 - 114	1*	0	0	1
Total	39	39	32	32
Mean	138.2	138.1	141.0	134.1
S.D.	10.8	10.7	8.4	12.3

* Retested on Wechsler Intelligence Scale - I.Q. = 124

TABLE 2.14 STANFORD-BINET SCORES OF PROGRAM AND COMPARISON
PUPILS, Class of 1965-66

I.Q. Scores	<u>Public</u>		<u>Catholic</u>	
	Program	Comparison	Program	Comparison
160 - 164	1	0	0	0
155 - 159	1	2	0	1
150 - 154	0	1	3	2
145 - 149	4	4	2	2
140 - 144	8	7	2	2
135 - 139	7	8	8	8
130 - 134	9	13	12	7
125 - 129	13	8	4	8
120 - 124	4	3	1	2
115 - 119	0	1	0	0
Total	47	47	32	32
Mean	134.7	135.7	135.8	134.8
S.D.	9.2	8.9	7.4	7.8

ORIGINAL DATA ON PROGRAM AND COMPARISON GROUPS

STEP TEST RESULTS

The STEP tests were administered to pupils in each entering class of the program and comparison groups and this process was repeated. Each fourth grade class took the STEP test battery, Form 3-A, in the fall of the academic year, and the fourth grade in each of the successive grades took the same form of the test the following fall. These tests were administered to both the program and comparison groups. Efforts were made to keep the test administrators and conditions equal throughout.

The tests were scored in the usual manner. Raw scores on the tests were transmuted to standard scores in the manner described in the test manual. In the tables on the following pages test scores are reported in terms of these scaled scores. Scores for a national sample are reported whenever possible so that the difference between the scores of the gifted pupils and those of other pupils may be made more apparent.

T-tests were used to determine the degree that the program and comparison groups differed significantly. Tables 2.15 through 2.18 give the necessary data. For further comparison the pupils in both the program and comparison groups were grouped as "Superior" (I.Q. of 140 and over), "Very Talented" (I.Q. of 130 to 139), and "Talented" (I.Q. of 120 to 129). Comparisons of such groups appear in tables II.1 through II.12 in Appendix A. As seen in the tables, program pupils of the public schools (1964-65) showed a significant difference at the two percent level in Social Studies; no significant difference in the other parts of the STEP battery appeared. For the Catholic program pupils, (class of 1964-65), all but the Writing test showed a difference significant at the five percent level. Both public and Catholic schools (class of 1965-66) showed no significant differences between the program and comparison groups with the exception of the mathematics and science sections of the test.

TABLE 2.15 SIGNIFICANCE OF DIFFERENCES BETWEEN PUBLIC PROGRAM AND COMPARISON GROUPS ON STEP TESTS

Class of 1964-65 - (N=39)

Item	National Means*	Program Mean	S.D.	Comparison Mean	S.D.	t-tests	Significance
1	2	3	4	5	6	7	8
Tests (Form 3A)							
Mathematics	238	255	9.3	256	9.1	-1.273	n.s.
Science	243	262	7.2	261	7.9	.604	n.s.
Writing	242	259	11.1	260	11.1	-.464	n.s.
Reading	244	269	11.3	265	10.9	1.465	.05-.10
Social Studies . . .	240	256	6.7	252	6.2	2.459	.02

*Source:

Educational Testing Service, Cooperative Test Division. "STEP Technical Report Book." pp. 23-24. 1957.
The National Means are not based on "gifted" programs, but on random samples.

TABLE 2.16 SIGNIFICANCE OF DIFFERENCES BETWEEN CATHOLIC PROGRAM AND COMPARISON GROUPS ON STEP TESTS

Class of 1964-65 - (N=32)

Item	National Means*	Program Mean	S.D.	Comparison Mean	S.D.	t-tests	Significance
1	2	3	4	5	6	7	8
Tests (Form 3A)							
Mathematics	238	255	10.7	252	7.4	2.127	.02
Science	243	261	8.4	257	7.2	2.402	.02
Writing	242	260	11.1	257	10.7	1.128	n.s.
Reading	244	267	11.1	263	10.7	2.346	.02
Social Studies . . .	240	255	8.4	250	7.6	2.130	.02

TABLE 2.17 SIGNIFICANCE OF DIFFERENCE BETWEEN PUBLIC PROGRAM AND COMPARISON GROUPS ON STEP TESTS

Class of 1965-66 - (N=47)							
Item	National Means*	Program Mean	S.D.	Comparison Mean	S.D.	t-tests	Significance
1	2	3	4	5	6	7	8
Tests (Form 3A)							
Mathematics	238	252	8.5	253	9.1	- .184	n.s.
Science	243	257	9.9	259	8.9	-1.241	n.s.
Writing	242	259	14.6	256	12.4	1.011	n.s.
Reading	244	264	13.4	262	12.5	1.883	n.s.
Social Studies . . .	240	253	8.2	254	7.1	-1.082	n.s.

TABLE 2.18 SIGNIFICANCE OF DIFFERENCE BETWEEN CATHOLIC PROGRAM AND COMPARISON GROUPS ON STEP TESTS

Class of 1965-66 - (N=32)							
Item	National Means*	Program Mean	S.D.	Comparison Mean	S.D.	t-tests	Significance
1	2	3	4	5	6	7	8
Tests (Form 3A)							
Mathematics	238	252	7.7	251	6.5	.906	n.s.
Science	243	263	4.4	257	7.8	3.796	.001
Writing	242	259	9.6	262	10.2	- .871	n.s.
Reading	244	270	11.1	262	10.0	4.387	.001
Social Studies . . .	240	254	7.3	251	9.0	1.654	.05-.10

When the groups were put into sub-groups of "Superior", "Very Talented", and "Talented" and then compared, no significant differences were found for the "Superior" sub-groups of either public or Catholic program pupils. The same findings appeared in the matching for mathematics and science with the exception of a significant difference in science at the five percent level for the Catholic class of 1964-65, sub-group "Very Talented", and at the one percent level in science for the Catholic class of 1965-66, sub-group "Very Talented". The data for the findings are to be found in Tables II.1 through II.12, Appendix A.

In summary, although the matching techniques to secure equated groups involved lowering of criteria to secure a sufficient number of paired pupils, the data tend to indicate that the program and comparison groups were basically equal on test scores.

NON-TEST DATA

Table 2.19 presents data relative to the commonality of socio-economic ratings made on the basis of Hollingshead Socio-Economic Classification. With the exception of the second Catholic group, 70% or more of the matches were either identical or within one step. A one step variation is not a great variation. Although a greater similarity in socio-economic level might be desired, the one obtained was sufficiently close as to be acceptable.

TABLE 2.19 MATCHING OF COMPARISON TO PROGRAM PUPILS ON BASIS OF HOLLINGSHEAD SOCIO-ECONOMIC CLASSIFICATION SCALE

Classification	Class of 1964-65	Percent in each group		Class of 1965-66
		Public	Catholic	
Same	33	23	34	15
Within one classification	36	44	25	40
Within two	10	15	19	21
Within three	13	12	13	15
Within four	8	2	9	6
Over four	0	4	0	3
Total	100	100	100	100

In order to describe a typical gifted fourth grader as well as to study changes in his behavior, initial and follow-up interviews were held with both the program and comparison pupils; and their mothers and fathers were asked to complete a questionnaire, separately.

Pupil Interviews provided information relative to the pupils' actions and attitudes toward their health, favorite recreation, favorite T.V. programs, reading of newspapers, reading of magazines, reading of books, outside of school activities, sports, hobbies, vocational choice by parents, educational ambitions, vocational ambitions, and closest friends. Tables presenting more complete information are given in Appendix A, Tables II.13 through II.34. The following paragraphs summarize these data.

Data about the parents and their appraisal of their child with respect to class index and occupation, reading interests, civic activities, hobbies, education, and sibling information were obtained by use of a questionnaire. Parent's appraisal of their child included information on the pupil's health and physical fitness, superior ability, problems at home, hobbies, interaction with playmates, reading interests, closest friends, and special talents. Complete responses to the pupil interviews and parent questionnaires are given in tabular form in Appendix II, Tables II.35 through II.43.

Rather than a summarizing of each table, the responses of the typical fourth grader will be reported. Where interesting difference occurs in the responses of any particular group, they are noted.

The typical fourth grader in the program or comparison group may be described by the following statements.

1. Was a boy. (The proportion of boys to girls was 1.4 to 1).
2. Felt he had no health problems, only some temporary ailments.
3. Preferred active play in groups slightly more than active play alone.
4. Preferred comedy and variety and TV adventure programs.
5. Liked to read comics and children's special sections in the newspapers.
6. Tended to read adult general interest magazines and children's magazines.
7. Selected a very wide reading of books including mysteries, biographies, and autobiographies, adventure and science fiction.
8. Was more apt to engage in such out of school activities as clubs and organizations, music and dancing lessons than to participate in sports and athletics.
9. Liked to engage in active group school sponsored programs.
10. Typical hobbies were collections, art, and craft work.
11. Planned to attain a baccalaureate or higher degree.
12. Expressed ambitions to become professional workers.
13. About half feel that their friends would describe them as being friendly and nice and that in general there would be no uncomplimentary remarks made about them.
14. Had two siblings and in most cases was the first born.

Descriptions of the parents.

1. About half the parents had studied in administrative and professional occupations; about a fourth of the parents were classified as being in the clerical, sales, and skilled employees. Roughly ten percent of the parents were semi-skilled or unskilled employees.
2. They tended to spend zero to five hours per week reading newspapers, magazines, and books.
3. About half the parents engage in social-fraternal types of activities.
4. They spent their leisure in sports and out-door activities, crafts, and cultural activities.
5. About forty percent of the parents had some college and approximately thirty percent held degrees.

Parents' descriptions of their children.

1. They were generally healthy and approximately one-fifth reported problems of health and diet.
2. About a third of the parents did not recognize that their children were gifted. Those that did reported that their children could learn easily and had good concentration. Early reading, early speech ability, and curiosity were also mentioned.
3. Less than a third of the parents described their children as stubborn, argumentative, bossy, and bad-tempered.
4. Enjoyed collections.
5. Got along with playmates the same as other children.
6. Read books and magazines, the latter being introduced about a fifth of the time and books about two-thirds of the time.
7. They had approximately five close friends.
8. They showed special talents in school subjects; art, music and sports.

In the third chapter the program in which the pupils described above were enrolled is presented in detail.

CHAPTER III

THE PROGRAM

ASSIGNMENT OF PUPILS

It was hoped that the selection techniques described in the previous chapter would produce about fifty public and fifty Catholic pupils each year for the new fourth grades. It was necessary to reduce first-year standards of selection somewhat to produce the desired numbers. After the first year no reduction was necessary.

A goal of fifty public and fifty Catholic fourth graders was established in order to have four classes of twenty-five each. Each grade did not necessarily retain twenty-five pupils, as a result of withdrawals from the program due to parents moving, etc. Thirty-nine of the public school class of 1964-65 and forty-seven of the class of 1965-66, thirty-two in each of the Catholic school classes of 1964-65 and 1965-66 were in the program throughout making a total of eighty-six public and sixty-four Catholic pupils in the program. It was decided to put the public program classes in regular public elementary and Catholic program pupils in regular Catholic school buildings. During the first two years this arrangement meant that two program classes were placed in each of the school buildings.

After the second year it became necessary to put the new fourth grade classes in other public schools (two classes of the same grade in a school) and the Catholic program pupils finally occupied a school of their own with no other grade school pupils.

One of the agreements between the parents and the administration of the schools for the acceptance of the children into the program was that the parents would agree to furnish the transportation. Needless to say, this plan created a problem for many of the parents and in particular, parents of Catholic pupils because of the much greater area encompassed and the larger distances to transport. In very few cases did the problem prove to be a significant factor in the child's entrance into the program.

Objectives of the Program

At the outset the objectives of the program were studied and adapted, and they remained reasonably constant throughout. The program was designed to assist the pupils to reach the following goals:

1. Gain more knowledge sooner and in greater depth than would be gained from the usual program.
2. Broaden their knowledge and understanding by introducing new areas of study as part of their regular program.
3. Increase their social awareness and social concern.
4. Develop leadership skills.
5. Strengthen their self-esteem by developing realistic self-evaluation of their abilities.
6. Promote critical and creative habits of attacking problems.
7. Stimulate their curiosity.
8. Broaden their interests.
9. Develop habits of self-motivation to learn.

ADMINISTRATION OF THE PROGRAM

A year prior to the beginning of the first fourth grade classes, a director or coordinator with preparation in the field of gifted children was selected for the position. A year was spent in curriculum planning, selecting text and reference books, getting supplies and equipment, and organizing the program. The coordinator saw the program through the first year of operation.

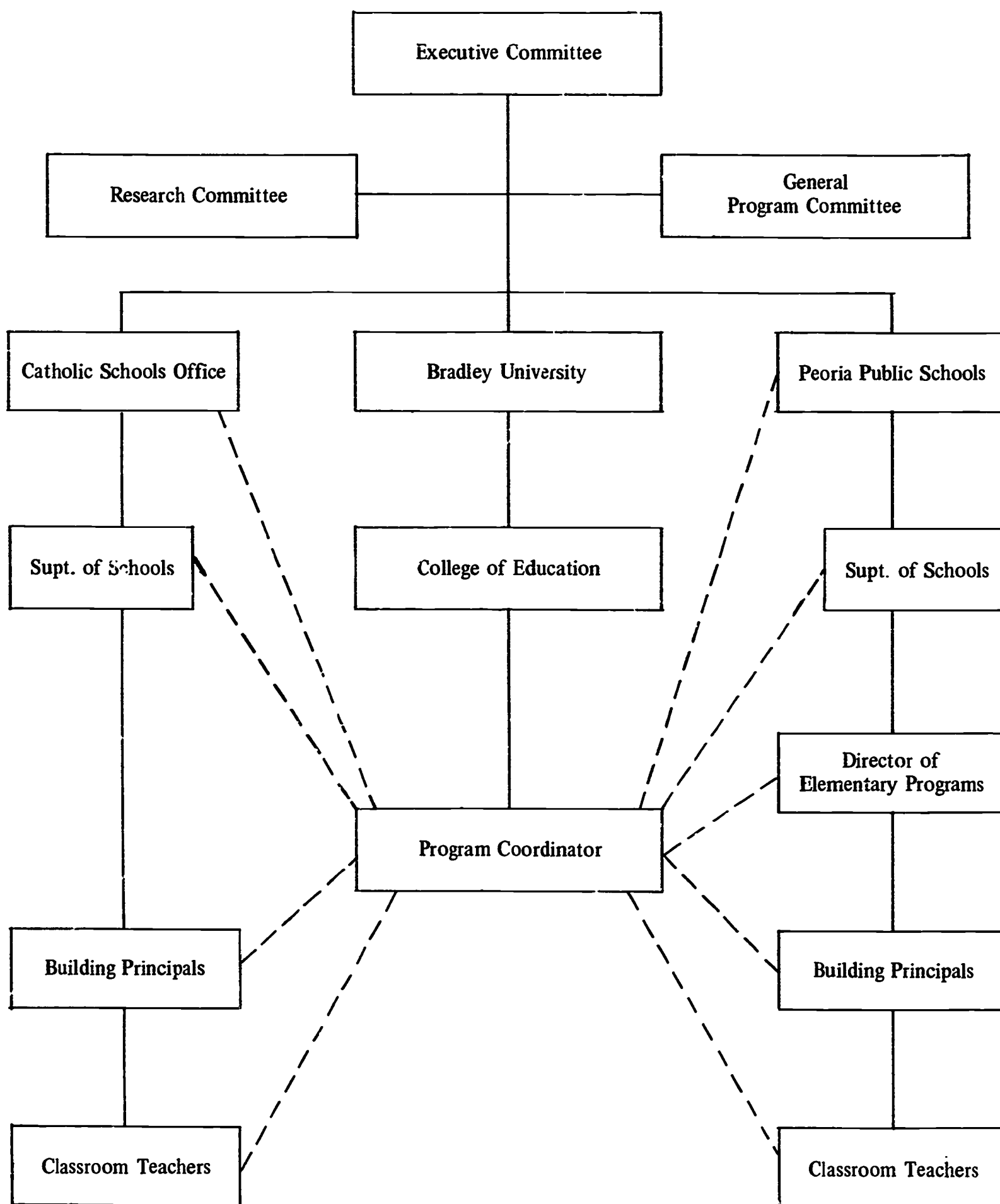
A program committee composed of the Superintendent of the Peoria Public and Catholic School Systems, the president of Bradley University, the Head of the Department of Elementary Education, and members of the funding agency constituted the program committee. A subcommittee of a representative of the Allied Foundation, the two superintendents, and two or more building principals was established to carry out the desires of the program committee.

An organizational chart on the following page explains the structure of the program.

For a year the program was without a coordinator because a suitable replacement could not be found. A coordinator was employed for the last three years. The functions of the coordinator were to:

1. Interpret and implement the policies of the Executive Committee. Monthly progress reports to be made to this body, and occasionally official decisions were requested.
2. Work cooperatively with the respective school districts in planning curriculum that would provide added direction and meaning to all learning experiences.

ORGANIZATION CHART PRESENTING PROGRAM COORDINATION



3. Assist teachers in the organizing of a flexible instructional program that would best meet the needs of these gifted pupils. This flexibility would indicate giving curriculum its broadest interpretation.
4. Provide teachers with the material things that could be helpful in a modern imaginative instructional program.
5. Keep abreast of current research findings concerning the gifted child, their psychological, social, and emotional needs, and their limits as well as their potentialities.
6. Encourage in-service training to improve instructional competencies and promote self-confidence in the handling of related responsibilities.

THE TEACHERS: THEIR SELECTION, ASSIGNMENT, AND PREPARATION

Ideally only the very best teachers should be assigned to a program for gifted pupils. It was not possible to have only experienced and top-rated teachers. There might even be a question of the advisability of such staffing if it were possible, because any superiority of the program pupils over the comparison pupils might be attributed to the quality of instruction.

Table 3.1 shows the teaching assignments, degrees held, and granting institution, age, hours of preparation in the area of the gifted, and total years of teaching experience.

TABLE 3.1

THE PROGRAM TEACHERS 1967-68

<u>TEACHERS</u>		<u>INSTITUTION AND DEGREE</u>	<u>AGE</u>	<u>HOURS GIFTED TRAINING</u>	<u>YEARS TOTAL EXPERIENCE</u>
No.					
1		M.A. Murray	35	10	16
2		B.A. Michigan	30	9	0
3		B.S. Bradley	35	5	13
4		B.S. Ill. Wes.	38	10	5
5		M.A. Bradley	38	16	7
6		B.S. Drake	29	0	7
7		B.S. Butler	31	10	5
8		B.S. Bradley	40	0	9
9		B.A. Alvernon	39	10	14
10		B.A. Alvernon	38	10	17
11		B.S. N.I.U.	26	0	3
12		B.A. Bradley	26	10	4
13		M.A. Bradley	35	3	6
14		B.A. Alverno	39	5	18
15		B.A. St. Joseph	43	5	18
16		M.A. Bradley	40	0	15
17		B.S. Bradley	42	0	15
<u>FOREIGN LANGUAGE TEACHERS</u>					
18	French	A.B. Baylor	67	0	17
19	French	B.S. Western	24	5	2
20	German	Ph.D. Berlin	65	0	20
21	German	A.B. Illinois	21	0	0
<u>FORMER TEACHERS</u>					
22		B.A. Mundelein	21	5	1
23		B.S. Alverno	22	5	1
24		B.A. St. Xav.	21	5	1
25		B.A. Asbury	32	0	7
26		B.S. Murray	34	8	11
27		A.B. Bradley	23	5	2
28		M.A. U.I.	48	6	12
29		M.A. Bradley	22	0	1
30		B.S. Nebraska	23	5	2
31		B.A. Emmanuel	22	0	1
32		B.S. Minn.	23	0	2
33		B.A. Knox	24	0	1

In order to better prepare the teachers for this new role as teachers of gifted children, a course "Education of the Gifted Child," was offered at Bradley University the second semester each year; the first year a series of lectures were held, as previously mentioned in the foreword. Each summer thereafter, a five-week workshop on teaching the gifted was offered by the University. The teachers beginning in the program took the second semester course and all were participants in the summer workshops. The following courses or institutes were provided the teachers over the period of years:

<u>Education 525</u>	<u>Education of the Gifted Child</u>	<u>3 hours</u>
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A survey of the characteristics of the gifted child, a study of the present research on education of the gifted, and an examination of programs for the gifted. Registration only on permission of the instructor.

Education 626	Institute for Teachers of Gifted Children – Social Studies	5 sem. hours
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A workshop consisting of lectures, demonstrations, observation, and individual study of gifted children from the standpoint of their identification, curriculum, and instruction. A laboratory school of grades 4, 5 and 6, will be operated in conjunction with the workshop.

Prerequisite: One year of elementary teaching experience.

Registration only on permission of the instructor.

Education 627	Institute for Teachers of Gifted Children – Science	5 hours
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An in-service institute for teachers of gifted children in methods of improving the conceptual level in science education. Participants are given an opportunity to practice various teaching strategies in a laboratory school for the purpose of developing a curricula to fit their local situations and assignments. Consent of the instructor is required for registration.

Education 628	Institute for Teachers of Gifted Children – Self-Assessment	5 hours
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A training program to develop greater awareness of teacher efficiency through the use of "Flander's Interaction Analysis," "Protocol Evaluation", and "The Style of Teaching Inventory". All participants must pre-register so that evaluation material can be collected well in advance of registration.

Prerequisite: Two years teaching experience and be eligible for admittance to Graduate School.

Education 629	Institute for Teaching of Gifted Children – Mathematics	5 hours
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An in-service institute for teaching of gifted children in methods of improving the conceptual level in mathematics.

Registration only by permission of the instructor.

Education 655, 656	Internship in Supervision and Evaluation of Programs for the Gifted	3 sem. hours
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Students will be assigned to the Director of the Cooperative Program for the Gifted, or the Director of Research, to participate actively in the respective activities.

Prerequisite: Two years of teaching experience.

Registration only by permission of the Dean of the College of Education.

In addition to the above, other efforts were made to improve the quality of instruction. Faculty meetings, curriculum planning sessions, attendance at conventions, visitation programs, and other types of in-service education were used.

The tenure of the teachers in the program was about the same as for teachers in general. Some left, either because of personal reasons or because of transferral out of the program after one year. Some remained with the program throughout the five years.

CURRICULUM ENRICHMENT

The Executive Committee and the respective school systems agreed that during the initial stages of the project there would be a complete and thorough coverage of the basic skills commonly included in the fourth grade. The public and Catholic schools would then give consideration to enriching their curriculum with supplementary activities and materials.

The committee asserted that a defensible assumption would be that academically talented students would be able to move through the basic grade level program at a greater accelerated rate than the so-called average child. Generally it was expected that the gifted child would complete his work with a degree of proficiency far ahead of other pupils, thus making it possible to introduce "experience situations" and ideas that would be both interesting and challenging.

As stated earlier in this chapter, the goals in education for the gifted are very much the same as for all children. The difference can best be expressed in terms of the rate of acceleration, depth of content, and breadth of scope. With these purposes in mind the assignment became one of structuring learning experiences which were appropriate for gifted children. Enrichment material must be appealing to the child, but what is more important, is the subtle task of structuring these learning experiences so that they center around:

- | | |
|------------------------------|--------------------------|
| 1. developing concepts | 4. working independently |
| 2. using time efficiently | 5. seeing relationships |
| 3. applying basic principles | 6. fostering creativity |

Obviously not all activities could accommodate each of the above listed goals. The challenge was to inculcate as many as possible whenever it was feasible. The emphasis focused on developing habits and attitudes that would survive the activity and serve the individual in subsequent endeavors.

The teachers in the Program were asked to submit a list of activities which they considered successful when examined in the light of the stated goals. From the individual reports a master list was developed. For the sake of clarity it was felt advisable to divide these activities into five major areas of enrichment. Samples of the activities in each are listed below under the following five major headings:

I. Projects and Experiments

1. Class activity of dissecting plants and doing skin grafting on plants for which a full account notebook was made.
2. Prepare a written report on the history of the compass and the role it has played in early exploration and discovery.
3. Examine the parts of an electric bell. Observe the electromagnets. Trace the flow of current through the wires of the bell. Make a schematic drawing of the circuit.
4. Search for information about the International Geophysical Year. Beginning on July 1, 1957, and lasting for 18 months, 67 nations participated in a program for gathering information about the earth and space. Much of this information has been published in both popular and scientific magazines. Write a 4-5 page report about the findings.
5. Write an original play of an imaginary trip to the moon. The dramatization might include the necessary preparation for survival on the moon and an account of what is done.
6. Work was done on number lines, tables, addition, subtraction, and multiplication in various bases.
 - a. About seven or eight students out of each class did enrichment work in geometry.
 - b. Twenty-six pupils were selected for work with base numbers.
7. Research unit on some phases of oceanography. Study ran about six weeks.
8. Atoms: Each child designed an implement or machine using the knowledge he had gained from the chapter study. The outstanding ones were furnaces; they were entirely different from each other.
9. Historical Time Line: A bulletin board was kept current showing a symbol placed on the time line of:
 - a. Exploration from 900-1700
 - b. Colonial development from 1600-1800
10. Chart of Explorers: Charts were made by partner groupings of students. These charts told four important orderly areas in the story of an explorer's life. This was used as a forerunner for research from an outline.
11. Colonial Newspaper: Students wrote articles in newspaper form with editorials, front page stories, society, sports, ads, and household hints to have been published in 1700.
12. Limited Resources Display: The students were allowed a basic amount of materials for a "school carnival" and they were to plan what they could create with these materials - that could be used to make a profit.
13. Music Appreciation: The students are exposed to classical music during this period. Very often they are asked to do creative writing and/or drawing while listening to this music.
14. Time Lines: Students made a variety of types of time lines to determine time spans of seconds, minutes, hours, days, weeks, and years.
15. Place Value Computer: The Students designed and manipulated this pocket-chart computer of Egyptian symbols in translating them to Arabic numerals.
16. Addition-Subtraction Relationship Strips: Each student made a set of the 100 basic relationships with a sliding cover revealing 2 of the 3 numerals of the equation, making use of this as an exercise in speed of immediate and accurate recall.
17. Diorama Construction: Rifles for Watie. The class was very pleased to have the author of the book evaluate their projects. The favorable reaction came after the fact and did not appreciably affect the quality of the projects - those who do good work did a commendable job, and the rest did a project in keeping with their overall production pattern.

18. Creative Writing: Describing the trip of an inanimate object. Example: A coffee bean from Brazil to Mr. Donut's in Peoria.
 19. Dissect starfish, clam, perch, and frog. Preceded by reports including anatomical diagrams.
 20. In-depth research in the field of science. Report presented orally accompanied by any sound effects or visual aid the pupil could devise.
 21. Develop a French Breakfast Menu to acquaint children with French dishes as well as the value of French money. Children put on six short plays in French; several were for assembly programs. The fifth grade attempted writing to French pupils, but with their meager experiences in formal grammar the assignment was much too difficult.
 22. Conduct a "What If" discussion. Example:
 - a. What if Columbus had not been born in a coastal city?
 - b. What if Columbus had been born in a wealthy family?
 - c. What if Spain would not have provided him with ships?
 23. Research groups studied the growth and development of Peoria - history, government, science, culture, business, industry, education, residence, and recreation.
 24. Produce an accurate model of a Feudal Manor after extensive reading concerning the way of life during that period (table top project).
 25. Literary Review: Published monthly, student editors set standards of excellence and reviewed each paper submitted for quality, grammar, punctuation, and spelling.
 26. Planning and making an imaginary continent with natural resources, population patterns, type of climate, and agricultural products. Includes maps.
 27. Individual research projects and group work on descriptive research. Appendix I gives full details concerning scope and objectives. Appendix II gives suggested approaches.
- II. Programs and Activities.
1. The students enacted what they would need and use for survival if stranded on a deserted island.
 2. Science programs presented to the Parent Teachers Association dealing with operation on the human body.
 3. Original poetry anthology; each child wrote poems and illustrated them.
 4. Production of "H.M.S. Pinafore" and "The Mikado". Students gained experience in interpreting a play, speaking and acting, voice training in singing.
 5. Radio production of Dickens "Christmas Carol", with sound effects on tape recorder.
 6. Christmas tea for parents teaching the use of introductions, explanations, and social situations.
 7. Choral reading program for parents.
 8. Explorer plays: Each student wrote, directed, and enacted a play. The classroom group evaluated each play by checking: Does the play fit the period of history and does the play tell the facts which put this man in recorded history?
 9. NASA Space Program with hand made TV, microphone, amplifier, space capsule, etc.
 10. Presented Dickens' "A Christmas Carol" with all-girl cast and a few contemporary modifications.
 11. Each student made his own "Happiness Book" which was to include only things that would really make him happy. Very creative!
 12. Put on a "show" of four original skits for the entire school which took the place of what the class termed, "dry, old book reports." It was original production which included: story, dialogue, music, sound effects, direction (student), and anything else that turns up as we go along.
 13. Debated current issues (these were more like heated discussions):
 - a. Whether boys are becoming more effeminate
 - b. Whether Indians on reservations are being deprived of their Civil Rights
 - c. Dating — grade school level
 - d. Value of capital punishment
 - e. What may have been the result if the South had won the Civil War?
 - f. What being a Christian means in 1967
- III. Field Trips
1. Chicago's Aquarium, Museum of Natural History, and Museum of Science and Industry
 2. Lakeview Cultural Center
 3. Bradley University, School of Applied Science
 4. Planetarium
 5. Historical Museum of Peoria
 6. Printing Business
 7. Court House
 8. A Bakery
 9. Bottling Plant
 10. Peoria Historical Society
 11. Forest Park Nature Center
 12. Peoria Water Works

13. A Dairy
14. Evening meeting of the Peoria Board of Education
15. Board of Trade, Chicago

IV. Visiting Speakers

1. Representative of a power and light utility discussing electricity.
2. A stockbroker speaking on "What Investments Mean."
3. A Federal Savings and Loan representative speaking and showing slides on "New Development in Peoria."
4. The City Manager, speaking on "The Government of Peoria."
5. An Executive of a department store speaking on "Retailing."
6. A professor from Bradley University speaking on "Poetry."
7. Representatives of television stations speaking on "Weather."
8. Air National Guard representative speaking on air navigation.
9. An Air Force cadet speaking about the Air Force Academy.
10. An executive from the Research Department of the Caterpillar Tractor Company spoke on the Industrial Uses of Electricity and Magnetism.
11. A professor, and his nephew, a captain in the United States Army, spoke on Viet Nam.
12. A banker teaching a unit on Math and Physics.
13. A dynamic young teacher discussing the Introduction of Modern Math.
14. A professor from Bradley University, discussing "International Studies."
15. A local citizen demonstrating equipment for scuba diving.
16. A local citizen discussed the world of communication.
17. A representative from the telephone company described the advances in telephone communication.
18. An insurance executive spoke about, "Stocks and Bonds."
19. A local economist discussed "Our Money System."
20. A newspaper photographer showed slides on "Viet Nam Today."

V. Curriculum

1. A part of the basic curriculum for each child in the program was the foreign language instruction. Each child received 30 minutes of instruction in a modern language (French or German) every day.
2. Another important area of enrichment is the economic unit developed by the Industrial Relations Center at the University of Chicago.

MODIFICATIONS OF INSTRUCTION

In general the initial instructional procedures were pretty much the usual. As experience was gained some innovations developed. Perhaps the greatest variance from the usual classroom were the provisions for instructional aids in terms of books, equipment, and personnel.

A clerk-typist was shared by from two to four of the teachers. The clerk-typist helped to prepare tests and instructional materials, and took over the teaching responsibility occasionally as needed. Books, equipment, and supplies were provided when they were needed. In order to keep anecdotal records, keep records of interviews, and make reports each teacher was supplied with a tape recorder.

As early as the fifth grade some departmentalization occurred to take advantage of the strengths of particular teachers. With the assistance of the clerk-typists, the teachers were freed to spend more time with the pupils and to have more time to themselves for preparation and reflection.

There was increasing emphasis on projects, independent study, pupil centered discussions, and self-directed activities. An effort was made to have the pupils become increasingly responsible for their own learning and to establish goals that would be challenging.

In addition to more direct contacts with the pupils, the teachers had more conferences with the parents. The parents also completed questionnaires at least once a year to indicate their opinions about what was happening to their children as a result of the program. Their responses were available to the teachers.

With the setting, the selection of the pupils, and details of the special offerings of the special classes in mind, the reader may now turn to the following chapters in which the evaluation instruments and results of the experiment are reported.

CHAPTER IV

INSTRUMENTS AND THEIR USE

When considering the research objectives and the best instruments to use in evaluating progress toward such objectives, the research committee chose a combination of established standardized tests and some new, descriptive instruments especially designed for the study.

In developing the evaluation techniques, the committee had the unique opportunity to try them with several classes of gifted pupils not reported upon in the major sections of this volume. Opinions of teachers and pupils were invaluable in helping the committee to prepare instruments for use in evaluation in many areas of study.

Most of the data obtained by use of the various instruments were analyzed in the following ways: (a) whole classes (program vs. comparison), and (b) in the I.Q. groupings of "Superior" (140 and above), "Very Talented" (130-139), and "Talented" (129 and below), within the classes. In this chapter a table listing each instrument, the group on which it was used, the years it was used, and the time of the school year it was employed is presented.

SEQUENTIAL TESTS OF EDUCATIONAL PROGRESS

The STEP tests published by the Cooperative Test Division of the Educational Testing Service were chosen by the committee as the academic measures for the study. They provide continuous measures of academic achievement through the years of general education. Some of the assumptions and goals utilized in the design of the test series as stated in the manual are (a) "the primary goal of the whole educational process is the development of the individual student," and (b) "The STEP series measures the broad outcome of general education, rather than the relatively narrow results of any specific subject-matter course." The committee chose to use the mathematics, writing, science, reading, and social studies sections of the battery.

The directions and time limits given in the manuals were followed. The series was given on three alternate half-days, and no group had more than two different tests in each session. The scheduling of the tests permitted the comparison groups to take the tests approximately one week after the program classes; all of the scoring and required statistical analyses, discussed in the following chapter, were completed by using the facilities of selected computer centers.

PUPIL INTERVIEWS

Each pupil involved in the research report was interviewed in the fourth and in the sixth or seventh grade. The purpose of the interviews was to obtain information about the pupils themselves and to learn about their ideas, opinions, and evaluations concerning the various aspects of the study and school. Some of the areas of interest to the interviewer were the pupil's health and physical fitness, his jobs at home, recreation, group and individual sports, reading, T.V. interests, educational ambitions, and his ideas about school.

The committee designed the questions to be answered by the pupils and set the requirements for the selection and training of interviewers. During the interview the responses of the pupil were written on an interview guide, and for many questions, the pupil was encouraged to expand upon his responses. There was no specific time limit for the interviews, and the sessions continued until all of the questions were considered and answered to the satisfaction of the interviewer.

PARENT INFORMATION

When a pupil entered the gifted classes, the parents were sent a series of informational questionnaires. The General Questionnaire placed the emphasis on the parents' occupation, education, reading interests, civic activities, and hobbies. For the section of the questionnaire dealing with the pupils, the parents were requested to appraise their child's health and physical fitness, superior ability, problems at home, hobbies, inter-actions with playmates, reading interests, closest friends, and special talents.

After the initial set of questionnaires was completed, the parents were sent a series of sequential questionnaires every year and were requested to evaluate the progress of their child at school. They were asked to comment on what they expected the special classes to accomplish and to offer suggestions for improvement.

FOREIGN LANGUAGE TESTING

The Common Concepts Foreign Language tests, level 2-A, in French, from the California Test Bureau, was used in measuring the language performances of the pupils. Using the directions given in the examiner's manual, the language teacher gave the test at the completion of the course work for each grade level. After the answer sheets were scored, the means and standard deviations were computed; the results were compared with the high school means and standard deviations published in the examiner's booklet.

Because the pupils in the comparison groups did not have language classes in the elementary grades, only the experimental pupils were tested to determine their proficiency in the use of a language.

ESSAY TESTS

The purpose of the yearly essay test was to determine and to compare the writing capabilities of the pupils for each grade level. In deciding upon the topic for each essay, the committee discussed the type of information that might be obtained from the essay and the interest of the topic to the pupils.

After reading a short description of the topic to the pupils, the tester suggested that they make an outline, allow time for proofreading and corrections, and spend most of their time in developing their ideas into a clear, well organized form. It was also emphasized that what they had to say and how well they said it was more important than spelling and punctuation. The length of the testing session was equal to the limit allowed for any STEP test.

As a method of determining the different levels of quality used as a reference in rating, one set of essays was randomly selected and evaluated independently by several raters. The essays were then compared on "quality of thought," (the selection and adequacy of ideas and supplementary details, and the manner of their organization), on style of writing (the clearness, effectiveness, and appropriateness of writing including matters of structure and diction, emphasis, and the means of transition between ideas), and on conventions (the number of spelling and grammatical errors).

The titles and school year of the various essays used in the study were: (a) an Autobiography (writing a short story about ones-self) 1965-66; (b) Life in the Twenty-first Century (telling what you think life will be like then — considering as many different things as you can, like school, homes, jobs), 1966-67; (c) How I Have Changed (describing the ways you have changed or not changed by participating in the study or the testing program, including subjects, attitudes, social development), 1967-68; and (d) Mysterious Substance (writing about the problems to be considered and ways of solving these problems if an unidentified space ship were to fly over the ocean and drop some unknown organic material into the water which would grow in the form of vegetation and could possibly be used as food) 1968-69.

Scores on the essays were compared and examples of an "excellent," "average," and "fair" essay were selected for reference guides. Using the means, standard deviations, and t-tests, the committee analyzed the difference between the program and comparison classes on the quality of the essays, the number of words employed, spelling, and grammatical errors.

RATINGS ON PUPIL INTERVIEWS

The committee wanted to determine if valid ratings of development in the areas of intellectual curiosity, interests, self-direction in learning, self-appraisal, and social concern could be made from answers given by pupils during interview sessions.

All of the identifying information on the program and comparison pupil interview sheets was deleted and a code number was attached. A detailed set of instructions and examples was written for each area being considered and explained to the raters.

In order to determine the range of the quality of answers given by the pupils, the rater was instructed to read a sample set of the interviews. In the actual rating of each interview, the rater chose one area, such as intellectual curiosity, and read the answers to all of the questions in support of this area. The pupil was then given a rating of high (outstanding and showing evidence of going beyond the usual level of performance), medium (usual level of work), low (below the usual level), or non (no response to the question) for this area.

After the interviews were rated, the typed interviews were identified and grouped into program and comparison classes.

TEACHER RATING SCALE

The teachers of the experimental and comparison classes were requested to rate each pupil on a scale designed by the committee. The major areas of this scale were analytical thinking, social concern, and relationship with peers, and the teacher rated each pupil on a series of items that pertained to each area. The deviations of the ratings were from 1 (outstanding) to 5 (poor) for each item. Using the sum of the ratings, the mean and standard deviations were computed for all teachers in one grade level, and comparisons between classes were made.

SPONTANEOUS TEACHER REPORTS

A specific record form was designed by the committee for use by the teachers. The areas selected for consideration in the form were creativity, intellectual curiosity, analytical thinking, development of interests, self-direction in learning, and social concern. The teachers in the sixth and seventh grades were given a form for each pupil and asked to make notes in terms of the above areas about the classroom work or special knowledge the pupil evidenced that seemed different from the usual performance expected at that grade. The teachers were also encouraged to write their comments within the allotted classroom time so that there would be no loss over an elapsed period of time.

After many months, the records were collected, and comments were tallied for every class. Specific comments were also given because of their importance to the areas being considered.

READING RECORDS

Each year the pupils in the program and comparison groups were given a booklet entitled "My Reading Record" by Isabel J. Peterson and Sara Innis Fenwick, published by Steck-Vaughn Company. They were instructed to list the titles, authors, and number of pages of all the books they read in or out of school.

The teachers were asked to check the booklets each week and to encourage the pupils to read in all areas, and not only materials as a reference for a particular assignment. Because of the many interests and the demand for a higher level of reading, the committee decided to add many books, some of college level, to the libraries of the participating schools.

PARENT EVALUATION FORMS

Parents were asked to comment on a series of questions pertaining to their attitudes and their children's attitudes to various facets of the study. The major items in the questionnaire were (a) What do you think is your child's attitude toward school, extra time, friends, reading? (b) What do you think about your child's attitude towards school, friends, and reading interests? The parents were also requested to comment on any special talents or abilities of the child, to introduce any items which had not been mentioned, and to offer suggestions for possible consideration.

TEACHER INFORMATION

In evaluating the program classes, the committee sought the personal opinions of the teachers involved in the different courses. With the consent of the teacher, the committee arranged for an interview by a trained interviewer and assured each teacher that the information would be used only by the committee.

The interviewer, specifically selected and trained for this work, asked each teacher to comment freely about the subjects, methods of teaching pupils, the equipment they liked and needed, and improvements that should be considered. The teachers were also encouraged to suggest some studies that might be carried out by the committee.

CLASSES FROM WHICH GIFTED PUPILS WERE PUT INTO PROGRAM

In order to try to get at the effect of removing gifted pupils from the regular classes upon those classes, a special outline was followed by an interviewer in having interviews with the teachers of those classes. The primary questions asked by the interviewer was relative to the problems the teacher encountered in the last few years in terms of offering a good program. If no mention was made of the loss of gifted pupils from her classes, the interviewer asked specifically if the removal of such pupils negatively affected the development of pupils in her classes.

TABLE 4.1

EVALUATION INSTRUMENTS

NAME OF	GROUP P=Program C=Comparison	USED Annually Y=Yes N=No Cont.=Continuously	TIME OF YEAR Fall - Spring
1	2	3	4
Stanford-Binet Test	P & C	Y=New Group Only	Fall
Wechler Intelligence Scale	P & C	Y=Re-test New Student	Fall
STEP - Sequential Tests of Educational Progress	P & C	Y	Fall
Foreign Language Tests	P	Y	Spring
Pupil Interviews	P & C	Y	F & S
Parent Questionnaire	P & C	Y	Fall
Cumulative School Records	P	Y	Fall
Anecdotal Records (Teacher Observations)	P & C	Y	Fall
Samples of classroom activity work on projects	P & C	Cont.	—
Essay Test	P & C	Y	Fall
Reading Record Booklets	P & C	Cont.	—
Teacher Rating Scale (6th)	P & C	Y	Spring
Teacher Interviews	P & C	Y	—

CHAPTER V

ACHIEVEMENT TEST DATA

The Sequential Tests of Educational Progress (STEP) were administered to each entering class in the program and comparison groups. Each class took one of the forms of this test battery each fall. For example, a fourth grade class took the test battery, Form 3-A, in the fall of the academic year, and took comparable forms of the test in successive autumns as they began a new grade. Form 2-A, a more difficult form of the test, was used when the class reached the seventh grade.

The test scores are constructed so that even though a different form of the test may be used in successive years, scores may be compared. This testing program of academic achievement provided a continuous record through the four years that the pupils were in the Gifted Child Program. Program and comparison classes were compared at each of five points from the fourth to eighth grades.

Testing conditions for both program and comparison groups were made as nearly identical as possible. Pupils in the comparison group were assembled in one place and tested in successive testing sessions; program pupils were tested in a similar manner. Although the physical locales for testing were different, the same test administrators supervised the administration of the tests.

Every effort was made to motivate the pupils to perform well. Although the tests did not have any immediate or direct benefit to the pupils other than that inherent in the activity of taking the test, these sessions appeared to be motivating. Pupils in the comparison groups maintained their main contact with the program through these testing sessions. These pupils knew that they had been identified as talented and that the taking of the tests was the symbol of their status. There is no reason to believe that these pupils in the comparison group took the testing sessions less seriously than did those in the program group.

The tests were scored in the usual manner. Raw scores were transmuted to scaled scores provided in the test manual. In the tables on the following pages test scores are reported in these scaled scores. Performances for a national sample are reported where possible so that the differences between the scores of the gifted pupils and those of other pupils may be made more apparent.

Two kinds of questions can be answered by these data. First, do the pupils in the program group score significantly better on tests of academic achievement than children in the comparison group? Second, can these test data be used to identify the pupils who seemed to be profiting most from the gifted child program?

One could argue that the pupils in the program ought to perform in a superior manner to those in the comparison group even when they devoted less time to materials covered by tests. Since the gifted child program stressed academic achievement, one would expect a significant elevation in achievement scores because these children received intensive instruction or were learning content at an earlier stage in an academic career. Thus, pupils in the program might very well show superior performance in mathematics because they had a more intensive mathematics program. However, the tests chosen might not measure what was taught in the gifted program. The research committee recognized that the standardized tests of academic achievement did not include test items to measure some of the important outcomes of the program and did not measure knowledge of all the subject content offered to the pupils in the program. Thus, it was conceivable that pupils in the program group would perform no better on these tests than would pupils in the comparison group because both learned well what the tests measured.

The second question that might be asked is, "Did the program in any way affect deleteriously their academic performance?" The addition of new content into the curriculum may have interfered with some traditional learning; therefore, it is significant to ask whether or not the children are doing less well than they might have done in a regular program.

These lines of argumentation can be brought together in the following projections. To the degree that the Sequential Tests of Educational Progress measure the special learnings being achieved in the gifted program, the gifted pupils ought to have shown superior scores. The pupils in the gifted program should not have shown inferior scores. If their scores were superior, one had to assess the extent to which this superiority was directly attributable to the program; but if the scores were inferior, one would necessarily assume that program activities interfered with acquiring traditional learning. If the test results of the program and the comparison groups were identical or highly similar, one can be sure that the children in the program were accomplishing as much as the comparison pupils, but could not assess the way in which the program had influenced academic achievement.

The research committee chose to use the Sequential Tests of Educational Progress because it was necessary to determine whether the pupils were accomplishing at least as much by being in the gifted program as they would have accomplished in a regular classroom. It was apparent after the first year of the program that whether or not the tests measured what was being learned in the program was a moot point. The tests were used continuously during the program to construct a record of academic achievement and to find ways in which the curriculum might be improved.

The data are reported in several different ways. It became apparent while analyzing the test data of the first class that even though the children scored near the top of the test, there was sufficient variability to analyze the data in terms of differences in I.Q. scores. The data are reported here both for the program and comparison groups and for the groups divided into three levels of I.Q. scores.

STATISTICAL PROCEDURES USED

There are two sets of groups to compare: (1) the class that entered the program as fourth graders in 1964-65 and its comparison group; and (2) the class that entered the program as fourth graders in 1965-66 and its comparison class. Each of these groups is subdivided into public and Catholic school pupils.

The following comparisons were made among these groups: (1) each gifted class was compared to its matched group at each grade; (2) the groups were compared in terms of amount of change over time, a not highly reliable measure of differential growth; (3) each group was compared to the national mean. However, it should be noted that these comparisons while logically sound and probably productive of valid results did fail to follow the usual statistical requirements of random selection. The statistical tests were required in order that individuals be randomly assigned to the groups being compared. As noted previously, random assignment to different programs in Peoria was not possible. Obviously, children are not assigned randomly to school systems.

The design of this study is the Non-Equivalent Control Group Design, described by Campbell and Stanley¹ (1963) in which they recommend when randomization of individuals in groups is not possible. The main limitation of this design is that it does not control for the interaction of selection and maturation; and that is, individuals in the groups are different in some ways, and these differences may be related to change in them over time. In this study, while this limitation exists logically, it is unlikely that such an interaction occurred.

The second limitation, a regression effect, can occur only if one of the groups has been selected from the extremes of measures used as a dependent variable. Such selection did not occur in this study.

Analysis of covariance has been used in all analyses. The experimental and comparison groups were originally matched. This matching and the use of the covariance statistic reduces considerably the risk of concluding that a result exists which could be caused by the statistical methodology employed.

Additional support for any conclusions drawn is derived from the repeated measures made on each class. Five sets of STEP scores are available for each group.

ANALYSES

Three kinds of matches were used in making the statistical analysis. Matching was done in three stages so that all students were matched on sex, and Stanford-Binet I.Q. score within ten points. However, approximately 60 percent of these groups (with one exception) were matched more closely by including the other matching factors described in Chapter II.

Analyses were made using the total sample in each group. Identical analyses were also made using only matches from the first and second stages of the matching process.

Other analyses were made by I.Q. level since there was more range on I.Q. scores in some groups than had been expected. Additional analyses were made of matches (I, II, and III, or I and II) within these levels.

The purpose of these analyses was to compare those groups which were most alike. Our reasoning was that if the total groups show significant differences, then the risk of accepting an effect was minimized by comparing the most closely matched sample.

The major comparisons are:

1. Program groups with comparison groups but separately by type of school, public and Catholic.
2. Within these major comparison, analyses were made by I.Q. level and in terms of closeness of match.
3. Comparisons were made at each grade level across five years.

EIGHTH GRADE PROGRAM AND COMPARISON GROUP SCORES, 1964-65

Two procedures were used for all analyses in this chapter. The .10 level of significance or greater is reported; t-tests were used on the final scores. It was decided to use these procedures because these statistical tests were likely to lead to accepting the null hypothesis. Two kinds of conclusions were possible: a conservative interpretation derived from a strict analysis of the results of the most rigorous statistical procedures and a more suggestive one where the consistency of trends was used to draw a conclusion. All tests of significance are one-tailed since the prediction was that the experimental groups would be superior to the comparison groups.

Analyses of covariance were run on the eighth grade scores (that is, scores on STEP taken in the fall of the year that the class was in the eighth grade) using fourth grade scores as the covariant. The results of these analyses are presented in Table 5.1. The scores used in this analysis were those of students matched on three or five criteria. The test for differences is rigorous, since the scores of only forty-eight (matched I and II) of the seventy-two students are used.

1. Gage, N.L. Handbook of Research in Education. Rand McNally Company, Chicago, 1965. pp. 217-220.

TABLE 5.1 SUMMARY OF ANALYSES OF COVARIANCE ON STEP EIGHTH GRADE SCORES OF PROGRAM AND COMPARISON PUBLIC SCHOOL GIFTED CHILDREN, MATCH I AND II (N=48)

Test	df	F	Significance
Mathematics	47	0.382	n.s.
Science	47	0.721	n.s.
Writing	47	0.003	n.s.
Reading	47	-0.005	n.s.
Social Studies	47	3.716	.05 - .10

P (.10) = 2.83; p (.05) = 4.05; p (.01) = 7.21

When the .10 level of significance was used as a criterion for rejecting the null hypothesis, the only significant difference between the groups was on the Social Studies Test. Even though the analysis of covariance is more likely to lead to accepting the null hypothesis, it is clear from inspecting the means that the differences on the Social Studies Test were substantiated. A second analysis of covariance using all the students is presented in Table 5.2.

TABLE 5.2 SUMMARY OF ANALYSES OF COVARIANCE OF STEP SCORES OF PROGRAM AND COMPARISON PUBLIC SCHOOL GIFTED CHILDREN, MATCH III (N=76)

Test	df	F	Significance
Mathematics	75	3.132	.05 - .10
Science	75	0.892	n.s.
Writing	75	0.910	n.s.
Reading	75	0.382	n.s.
Social Studies	75	5.818	.01 - .05

P (.10) = 2.78; p (.05) = 3.98; p (.01) = 7.05

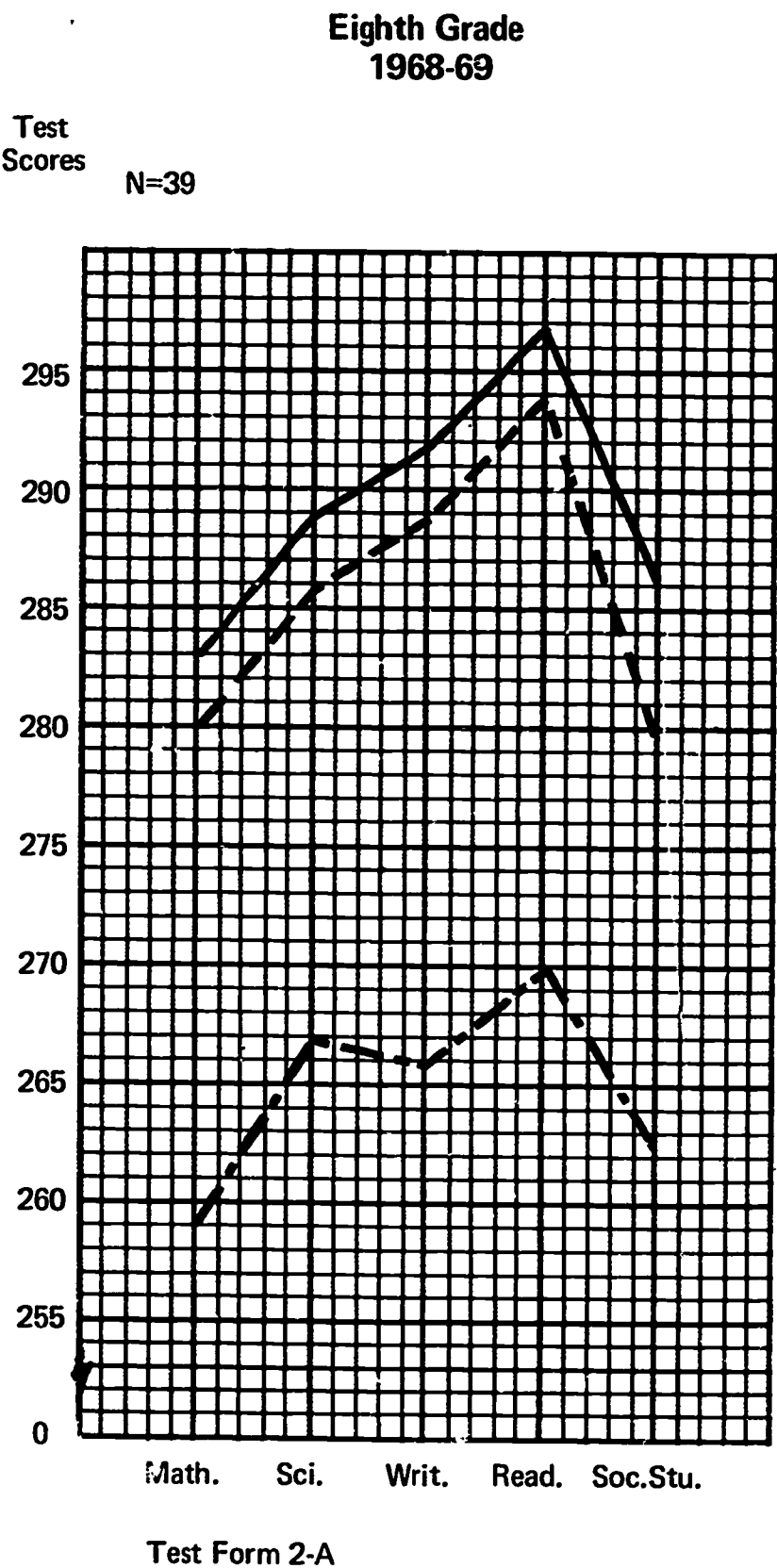
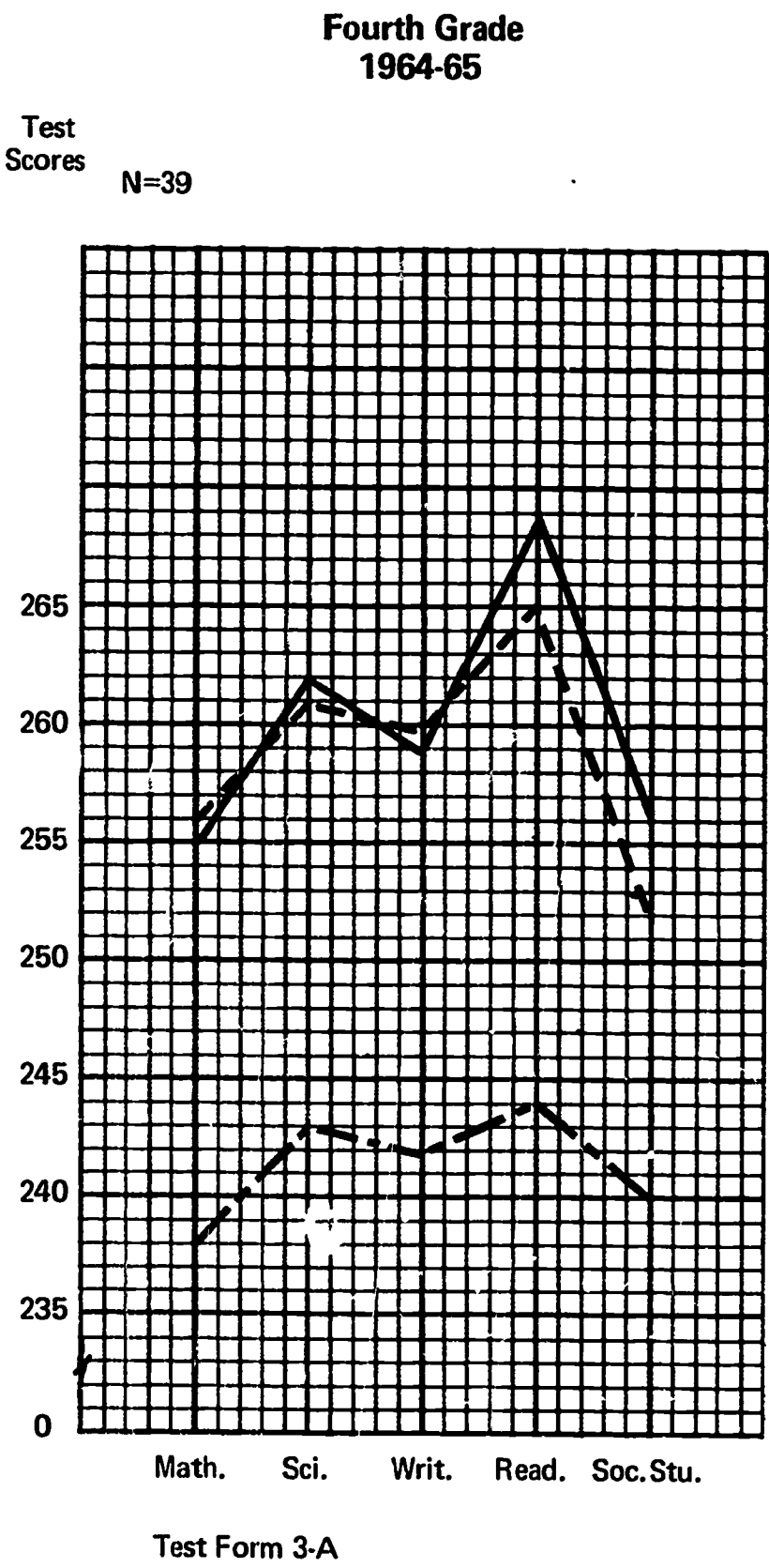
In this analysis, significant differences appeared on the Mathematics and Social Studies tests when the .10 level as a criterion was employed.

The means and standard deviations for the eighth grade scores are presented in Table 5.4. Figure 5.1 is a graph of the mean scores for the group.

There was a general trend of superiority favoring the program group, but some of the differences were not large and not significant. The most reasonable conclusion is that the groups differed in social studies achievement and probably in mathematics achievement. In terms of absolute differences, that is social studies was the most meaningful.

An inspection of Figure 5.1 and Tables 5.3 and 5.4, indicates the kinds of changes that seemed to have occurred. The groups differed some at the fourth grade; the comparison group was superior to the program group in mathematics; the program to the comparison in reading and social studies. (see Table 5.3) The difference in social studies is probably the most meaningful of these differences.

Figure 5.1 Means for STEP Tests for Eighth Grade Program and Comparison Public Pupils Class of 1964-65



Program _____

Comparison _____

National _____

TABLE 5.3 SIGNIFICANCE OF DIFFERENCE OF STEP SCORES
OF PUBLIC FOURTH GRADE PUPILS, CLASS OF 1964-65 (N=39)

Item	National Mean	Program Mean	S.D.	Comparison Mean	S.D.	t-tests	Significance
1	2	3	4	5	6	7	8
Tests (Form 3A)							
Mathematics	238	255	9.3	256	9.1	-1.273	n.s.
Science . . .	243	262	7.2	261	7.9	.604	n.s.
Writing . . .	242	259	11.1	260	11.1	-.464	n.s.
Reading . . .	244	269	11.3	265	10.9	1.465	.05 - .10
Soc. Stu. . .	240	256	6.7	252	6.2	2.459	.01

P (.10) = 1.30; p (.05) = 1.68; p (.01) = 2.46

By the eighth grade, the program class was superior on all tests. (see Figure 5.1 and Table 5.4) The analyses of covariance indicated that the difference in social studies, and the size of the absolute differences was most meaningful. A trend towards superiority of the program group was clear.

TABLE 5.4 SIGNIFICANCE OF DIFFERENCE OF STEP SCORES OF
PUBLIC EIGHTH GRADE PUPILS, CLASS OF 1964-65 (N=39)

Item	National Mean	Program Mean	S.D.	Comparison Mean	S.D.	t-tests	Significance
1	2	3	4	5	6	7	8
Tests (Form 2A)							
Mathematics	259	283.1	8.2	280.1	8.1	1.675	.05
Science	267	288.6	10.0	286.1	10.2	1.150	.10
Writing	266	291.6	12.9	289.4	13.7	.858	n.s.
Reading	270	297.2	10.4	293.5	17.9	1.154	.10
Soc. Studies	262	285.6	10.5	278.5	8.7	3.616	.01

P (.10) = 1.30; p (.05) = 1.68; p (.01) = 2.46

**COMPARISON OF PROGRAM AND COMPARISON PUBLIC SCHOOL TEST SCORES
SEVENTH GRADE 1968-1969**

Table 5.5 presents the results of the analysis of covariance on the STEP scores of the seventh grade public school classes, using students in Math I and II.

TABLE 5.5 **SUMMARY OF ANALYSES OF COVARIANCE OF STEP SCORES OF
SEVENTH GRADE PUBLIC PROGRAM AND COMPARISON CLASSES,
MATCH I AND II, (N=62)**

Tests	df	F	Significance
Mathematics	1.61	0.116	n.s.
Science	1.61	5.178	.05
Writing	1.61	0.086	n.s.
Reading	1.61	0.725	n.s.
Social Studies	1.61	2.204	n.s.

$P (.10) = 2.83$; $p (.05) = 4.04$; $p (.01) = 7.1$

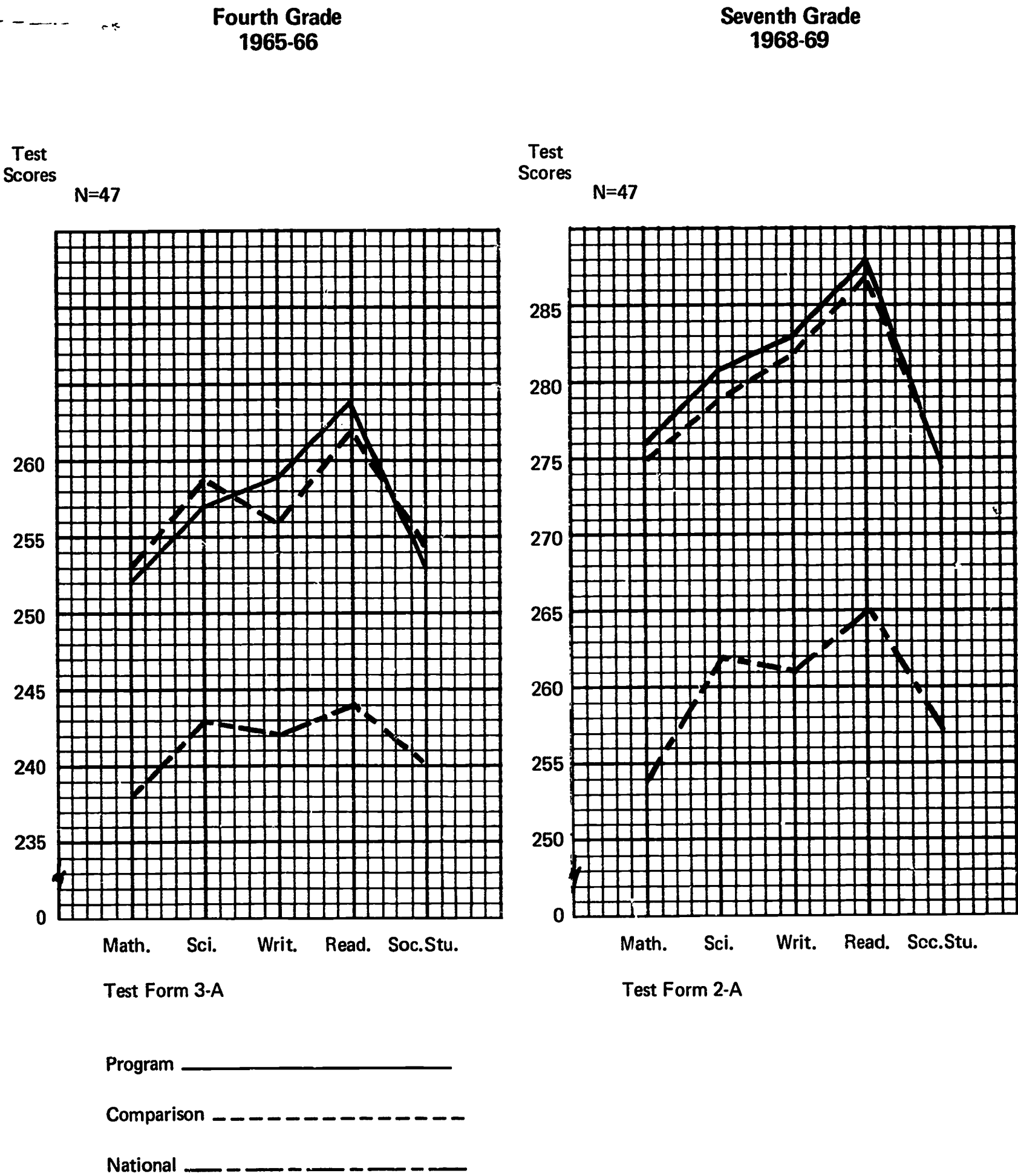
On the basis of this rigorous test, the groups differ significantly on the Science test. Table 5.6 presents the analyses of covariance using the total group.

TABLE 5.6 **SUMMARY OF ANALYSES OF COVARIANCE OF STEP SCORES OF
SEVENTH GRADE PUBLIC PROGRAM AND COMPARISON CLASSES
MATCH III (N=86)**

Test	df	F	Significance
Mathematics	1,85	0.326	n.s.
Science	1,85	4.560	.05
Writing	1,85	0.059	n.s.
Reading	1,85	0.216	n.s.
Social Studies	1,85	1.260	n.s.

$P (.10) = 2.77$; $p (.05) = 3.97$; $p (.01) = 7.03$

Figure 5.2 Means for STEP Tests for Seventh Grade Program and Comparison Public Pupils Class of 1965-66



The groups differ significantly on the Science test in this analysis also. An inspection of Tables 5.7 and 5.8 and Figure 5.2 indicate the nature of the changes occurring.

TABLE 5.7
SIGNIFICANCE OF DIFFERENCE OF STEP SCORES OF
PUBLIC FOURTH GRADE PUPILS, CLASS OF 1965-66 (N=47)

Item	National Mean	Program Mean	S.D.	Comparison Mean	S.D.	t-tests	Significance
1	2	3	4	5	6	7	8
Tests							
Mathematics	238	252	8.5	253	9.1	-.184	n.s.
Science	243	257	9.9	259	8.9	-1.241	n.s.
Writing	242	259	14.6	256	12.4	1.011	n.s.
Reading	244	264	13.4	262	12.5	1.883	.05
Soc. Studies .	240	253	8.2	254	7.1	-1.082	n.s.

P (.10) = 1.30; p (.05) = 1.67; p (.01) = 2.40

TABLE 5.8
SIGNIFICANCE OF DIFFERENCE OF STEP SCORES OF
PUBLIC SEVENTH GRADE PUPILS, CLASS OF 1968-69 (N=47)

Item	National Mean	Program Mean	S.D.	Comparison Mean	S.D.	t-test	Significance
1	2	3	4	5	6	7	8
Mathematics	254	275.6	7.7	274.6	9.4	.496	n.s.
Science	262	280.7	8.4	279.0	9.5	1.005	n.s.
Writing	261	283.4	15.7	282.1	14.4	.545	n.s.
Reading	265	287.5	16.0	287.0	14.3	.165	n.s.
Soc. Studies .	257	273.9	7.8	273.5	7.1	.294	n.s.

P (.10) = 1.30; p (.05) = 1.67; p (.01) = 2.40

In the fourth grade the groups did not differ except on the reading test. By the seventh grade, three years later, the groups performed at a superior level in science. The absolute difference was not large, but it should not be overlooked that the program group was somewhat below the comparison group in the fourth grade.

**COMPARISON OF PROGRAM AND COMPARISON CATHOLIC SCHOOL
PUPILS' STEP SCORES, EIGHTH GRADE, CLASS OF
1964-65**

Table 5.9 presents the analyses of covariance for those students who were matched on three or five criteria. They are only half of the total matched group. The risk of an error occurring as a result of lack of control for the interaction of selection and maturation is great in this case. If these cautions are noted, then, as the analysis indicates, the groups differed only in mathematics achievement.

TABLE 5.9 **SUMMARY OF ANALYSES OF COVARIANCE OF STEP SCORES OF
EIGHTH GRADE CATHOLIC PUPILS, MATCH I AND II
CLASS OF 1964-65 (N=16)**

Test	df	F	Significance
Mathematics	1,15	3.555	.05 - .10
Science	1,15	0.018	n.s.
Writing	1,15	1.285	n.s.
Reading	1,15	0.168	n.s.
Social Studies	1,15	2.108	n.s.

$P (.10) = 3.07$; $p (.05) = 4.54$; $p (.01) = 6.20$

Table 5.10 presents the analyses of covariance for the total group.

TABLE 5.10 **SUMMARY OF ANALYSES OF COVARIANCE OF STEP SCORES OF
PROGRAM AND COMPARISON EIGHTH GRADE CATHOLIC PUPILS
MATCH III, CLASS OF 1964-65 (N=54)**

Test	df	F	Significance
Mathematics	1,53	6.372	.01 - .05
Science	1,53	7.404	.01
Writing	1,53	1.837	n.s.
Reading	1,53	0.329	n.s.
Social Studies	1,53	0.037	n.s.

$P (.10) = 2.80$; $p (.05) = 4.02$; $p (.01) = 7.14$

This analysis indicated that the program group was superior to the comparison group in mathematics and science achievement.

As Tables 5.11 and 5.12 and Figure 5.3 indicate, at the fourth grade the program group was superior to the comparison group on all tests except writing. At the eighth grade the groups differed substantially on the Mathematics and Science tests. These differences were substantial.

TABLE 5.11
SIGNIFICANCE OF DIFFERENCE OF STEP SCORES OF
CATHOLIC FOURTH GRADE PUPILS, 1964-65 (N=32)

Item	National Mean	Program Mean	S.D.	Comparison Mean	S.D.	t-test	Significance
1	2	3	4	5	6	7	8
Tests (Form 3A)							
Mathematics	238	255	10.7	252	7.4	2.127	.05
Science	243	261	8.4	257	7.2	2.402	.01
Writing	242	260	11.1	257	10.7	1.128	n.s.
Reading	244	267	11.1	263	10.7	2.346	.05
Social Studies	240	255	8.4	250	7.6	2.130	.05

P (.10) = 1.30; p (.05) = 1.67; p (.01) = 2.39

TABLE 5.12
SIGNIFICANCE OF DIFFERENCE OF STEP SCORES OF CATHOLIC
EIGHTH GRADE PUPILS, 1968-1969 (N=32)

Item	National Mean	Program Mean	S.D.	Comparison Mean	S.D.	t-test	Significance
1	2	3	4	5	6	7	8
Tests (Form 2A)							
Mathematics	259	284.1	8.6	276.2	10.4	3.205	.001
Science	267	286.7	10.4	277.6	10.5	3.294	.001
Writing	266	286.8	9.3	286.4	12.9	.130	n.s.
Reading	270	295.6	10.0	291.4	14.2	1.271	n.s.
Social Studies	262	282.0	10.1	278.5	12.2	1.297	.10

P (.10) = 1.30; p (.05) = 1.67; p (.01) = 2.39

Analyses of covariance of STEP scores using fourth grade scores as covariants are presented in Table 5.13.

TABLE 5.13
SUMMARY OF ANALYSES OF COVARIANCE OF STEP SCORES OF
SEVENTH GRADE CATHOLIC PUPILS
MATCH I AND II, CLASS OF 1965-1966 (N=36)

Test	df	F	Significance
Mathematics	1,35	0.023	n.s.
Science	1,35	4.989	.05
Writing	1,35	0.032	n.s.
Reading	1,35	0.609	n.s.
Social Studies	1,35	2.884	.10

P (.10) = 2.86; p (.05) = 4.14; p (.01) = 7.48

Figure 5.3

Means for STEP Tests for Eighth Grade Program
and Comparison Catholic Pupils
Class of 1964-65

Fourth Grade
1964-65

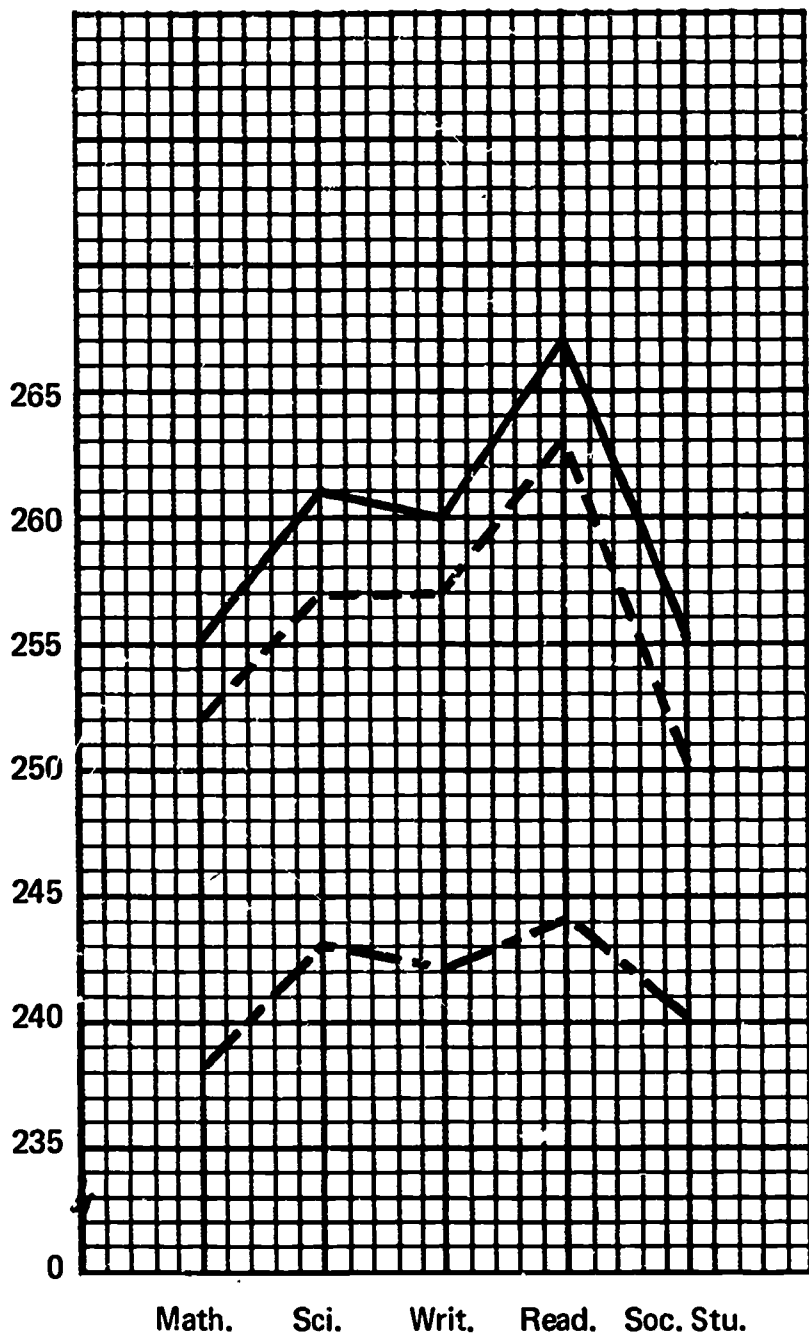
Eighth Grade
1968-69

Test
Scores

N=32

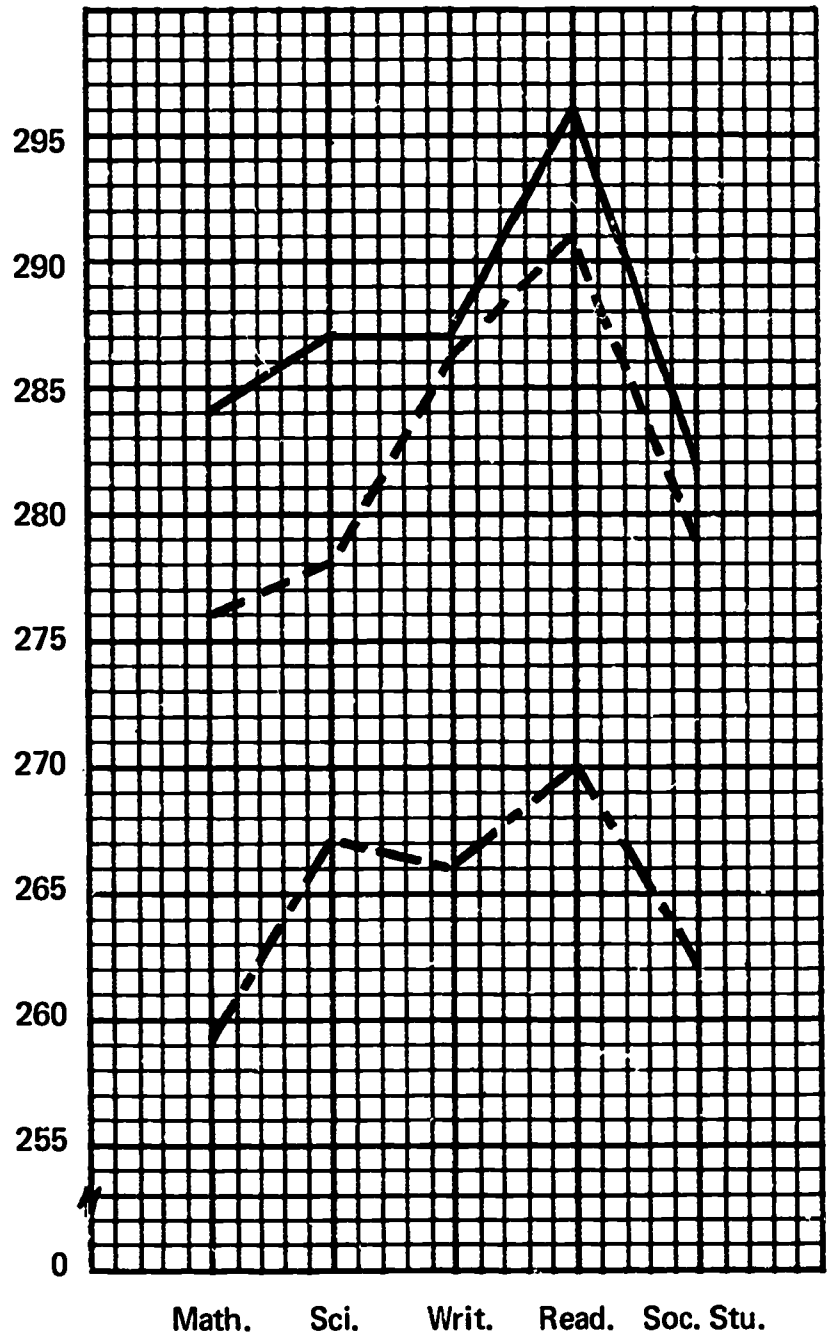
Test
Scores

N=32



Math. Sci. Writ. Read. Soc. Stu.

Test Form 3-A



Math. Sci. Writ. Read. Soc. Stu.

Test Form 2-A

Program _____

Comparison _____

National _____

The differences on the Science test are significant. The analyses of covariance using the total group are presented in Table 5.14.

TABLE 5.14 SUMMARY OF ANALYSFS OF COVARIANCE OF STEP SCORES OF SEVENTH GRADE CATHOLIC PUPILS, MATCH III CLASS OF 1965-1966 (N=62)

Test	df	F	Significance
Mathematics	1,61	1.097	n.s.
Science	1,61	6.284	.01 - .05
Writing	1,61	3.070	.10
Reading	1,61	3.002	.10
Social Studies	1,61	8.328	.01

P (.10) = 2.79; p (.05) = 4.00; p (.01) = 7.08

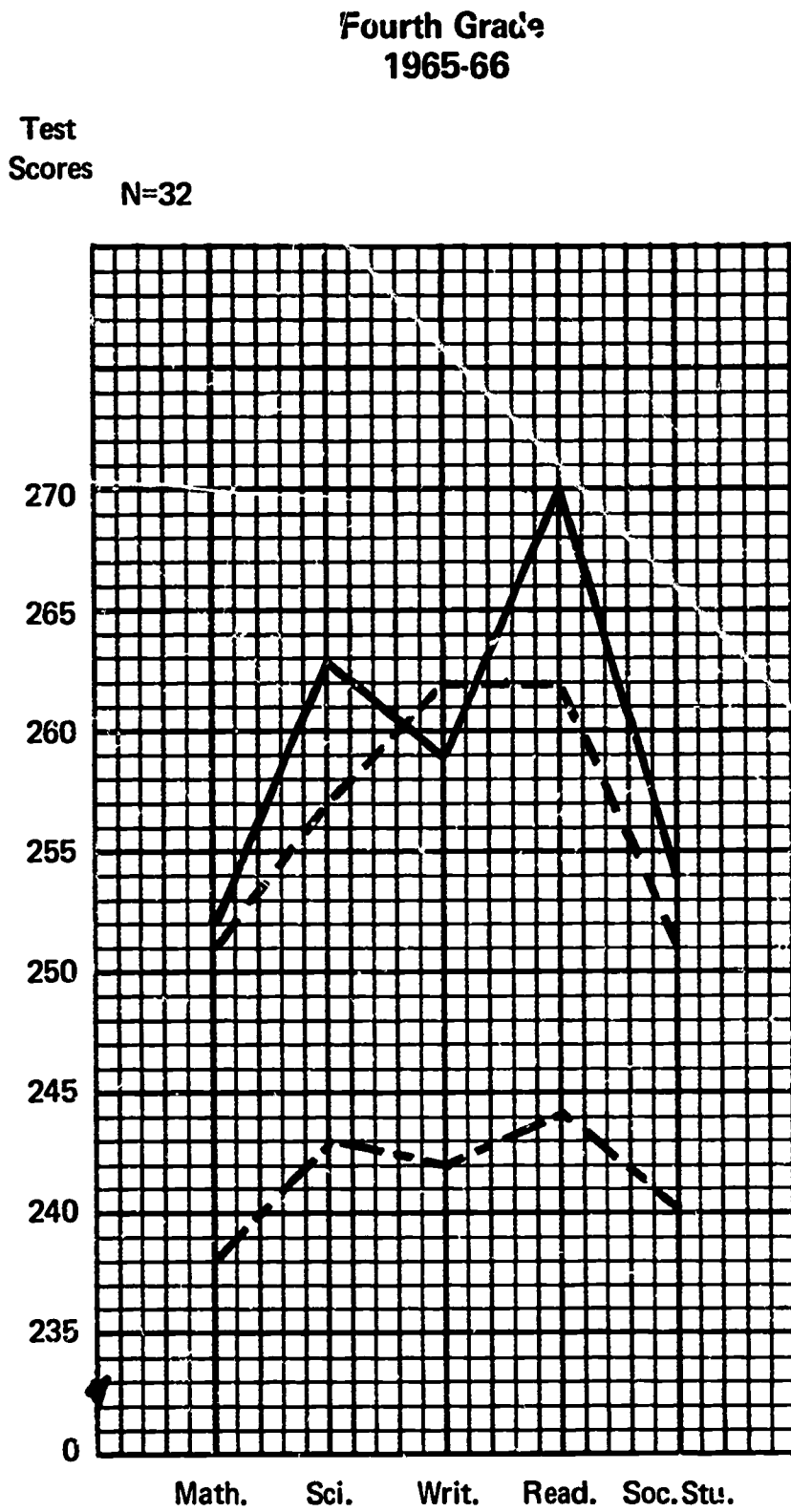
TABLE 5.15 SIGNIFICANCE OF DIFFERENCE OF STEP TEST SCORES FOR CATHOLIC FOURTH GRADE PUPILS CLASS OF 1965-66 (N=32)

Item	National Mean	Program Mean	S.D.	Comparison Mean	S.D.	t-tests	Significance
1	2	3	4	5	6	7	8
Tests (Form 3A)							
Mathematics	238	252	7.7	251	6.5	.906	n.s.
Science	243	263	4.4	257	7.8	3.796	.01
Writing	242	259	9.6	262	10.2	-.871	n.s.
Reading	244	270	11.1	262	10.0	4.387	.001
Social Studies	240	254	7.3	251	9.0	1.654	.05

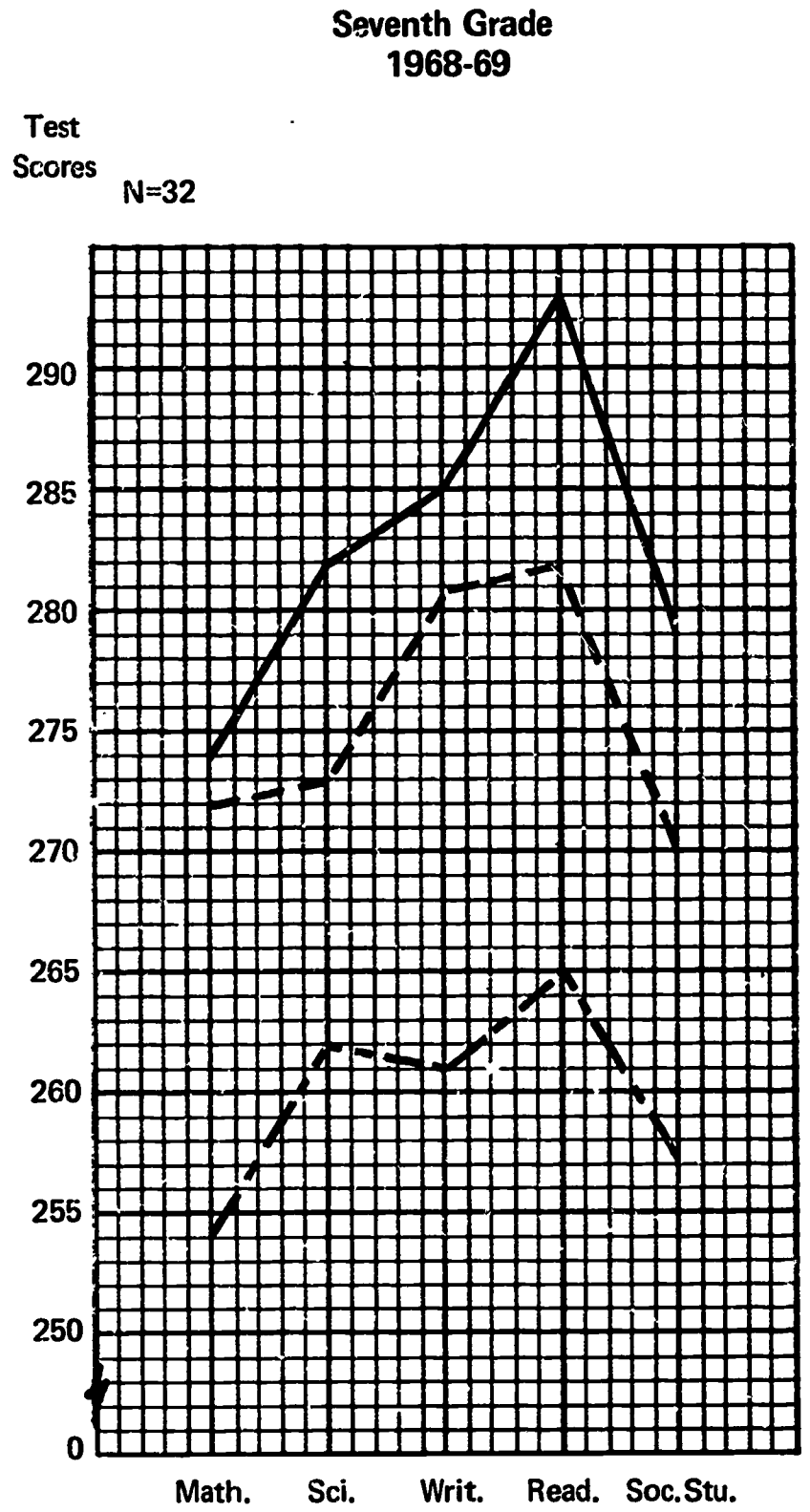
P (.10) = 1.30; p (.05) = 1.67; p (.01) = 2.39

Figure 5.4

Means for STEP Tests for Seventh Grade Program
and Comparison Catholic Pupils
Class of 1965 -66



Test Form 3-A



Test Form 2-A

Experimental _____

Comparison - - - - -

National - - - - -

TABLE 5.16
SIGNIFICANCE OF DIFFERENCE OF STEP SCORES
OF SEVENTH GRADE CATHOLIC PUPILS
CLASS OF 1965-66 (N=32)

Item	National Mean	Program Mean	S.D.	Comparison Mean	S.D.	t-tests	Significance
1	2	3	4	5	6	7	8
Tests (Form 2A)							
Mathematics	254	273.8	5.9	272.1	6.7	1.271	n.s.
Science	262	281.8	8.2	273.3	9.0	3.756	.001
Writing	261	284.9	16.2	280.5	14.2	1.404	.05
Reading	265	293.2	15.8	281.7	13.5	3.569	.001
Social Studies	257	278.8	8.9	270.4	10.9	3.190	.001

P (.10) = 1.30; p (.05) = 1.67; p (.01) = 2.39

These data show that the program classes were superior on all tests except mathematics. Tables 5.15 and 5.16 and Figure 5.4 show the characteristics of these differences. The program pupils class were superior to the comparison pupils on three tests (science, reading, and social studies), in the fourth grade. It maintained this superiority, though the differences were less significant in reading, and became significant in writing. Clearly the pupils in the program classes were superior to the comparison pupils. The differences were significant and substantial with the exception of those in mathematics.

SUMMARY OF RESULTS OF THE ANALYSIS OF COVARIANCE
ON STEP SCORES

The easiest way to visualize the results of the foregoing analyses is to present them in a box score. In the table a double X (XX) indicates a probable statistically significant superiority favoring the program group. A double (XX) underlined indicates a statistically significant difference which is probably reliable. No symbol in underlined unless the result appeared significant in one of the analyses of covariance.

TABLE 5.17
SUMMARY OF SIGNIFICANT DIFFERENCE ON STEP SCORES
OBTAINED FOR ALL GROUPS

Public	Mathematics	Science	Writing	Reading	Soc. Studies
8th Gr.	<u>XX</u>	XX		XX	XX
7th Gr.		<u>XX</u>			
Catholic					
8th Gr.	<u>XX</u>	<u>XX</u>			XX
7th Gr.		<u>XX</u>	<u>XX</u>	<u>XX</u>	<u>XX</u>
No. of Significant Difference	2	4	1	2	3
No. of Probably Reliable (12/20)					
Reliable Difference (8/20)	2	3	1	1	1

There was no instance in which the comparison groups ever exceeded the program groups in absolute differences and only three instances in which the groups were numerically equal. A summary of the differences follows.

Reliably Significant Difference Favoring Program Group	8
Probable Statistically Significant Difference Favoring Program Group	4
Numerical <u>but</u> Not Significant Difference Favoring Program Group	5
No Difference Numerically	3

Figures 5.5 through 5.5b illustrate the trends in performance over the years for program and comparison groups of the public eighth grade classes. Similar figures V.1 through V.14 showing similar data for the other classes will be found in Appendix B.

STEP test form 3-A was used for the first three years of the program. Differences between the classes were consistently non-significant. Both program and comparison classes scored at the ceiling of the test. Form 2-A, a higher level of the test was substituted. Differences favoring the program group then appeared as reported here.

As the figures show, the program group was usually superior. In cases where differences appeared, they seemed to increase after the more difficult form of the test is used.

When the results in Table 5.17 are read against the figures, it is apparent that some classes did better than others. The Catholic seventh grade was consistently superior to its comparison class. The public seventh grade was superior in one instance to its comparison group. Such variation was probably the result of such factors as the classes having different teachers and offering variations in the curriculum.

THE RELATION OF I.Q. SCORES TO ACHIEVEMENT

The group of children selected for this program were not identical in many respects. Their measured I.Q.'s for example, varied by as much as twenty to thirty points. It became apparent while inspecting the data that some differences in achievement between the groups might be related to I.Q. In this section the achievement data analyzed by I.Q. level are presented. As in the preceding section, two kinds of analyses of covariance were made: the first with Matches I and II, the second with Match III.

The students in each group, program and comparison, public and Catholic, were sorted into three I.Q. levels; superior (140 and above); very talented (130-139); talented (129 and below). The reader will recall that, although the cut-off score for selection for this program was 130, some students were selected whose measured I.Q. was below 130. Comparisons were run between program and comparison classes by I.Q. level.

Three questions could be answered by this analysis: (1) is there a difference between program and comparison classes? (this question was answered in the first section of this chapter, but the analysis discussed here also answers the same question); (2) is there a difference by I.Q. level?; (3) is there an interaction effect between treatment (program vs. comparison) and I.Q. level?

The answers to these questions gave practical value. Perhaps the experimental program "works" best only for the very brightest. Or, there may be no difference in achievement between the brightest groups, but a difference may appear in the relatively lower groups. The question simply is, does the program have a greater influence on some students than others?

The design of the analyses may be portrayed as:

	Superior	Very Talented	Talented
Program			
Comparison			

In some instances there were no cases in the low group.

Twenty such analyses were run, each yielding a test of significance for program vs. comparison, superior vs. very talented vs. talented, and an interaction effect. Table 5.18 through 5.18c summarizes the results of these analyses for Match I and II children. Fourth grade test scores were used as the covariate.

Figure 5.5 Means of Public Program and Comparison
Eighth Grade STEP Scores by Grade
Class of 1964-65

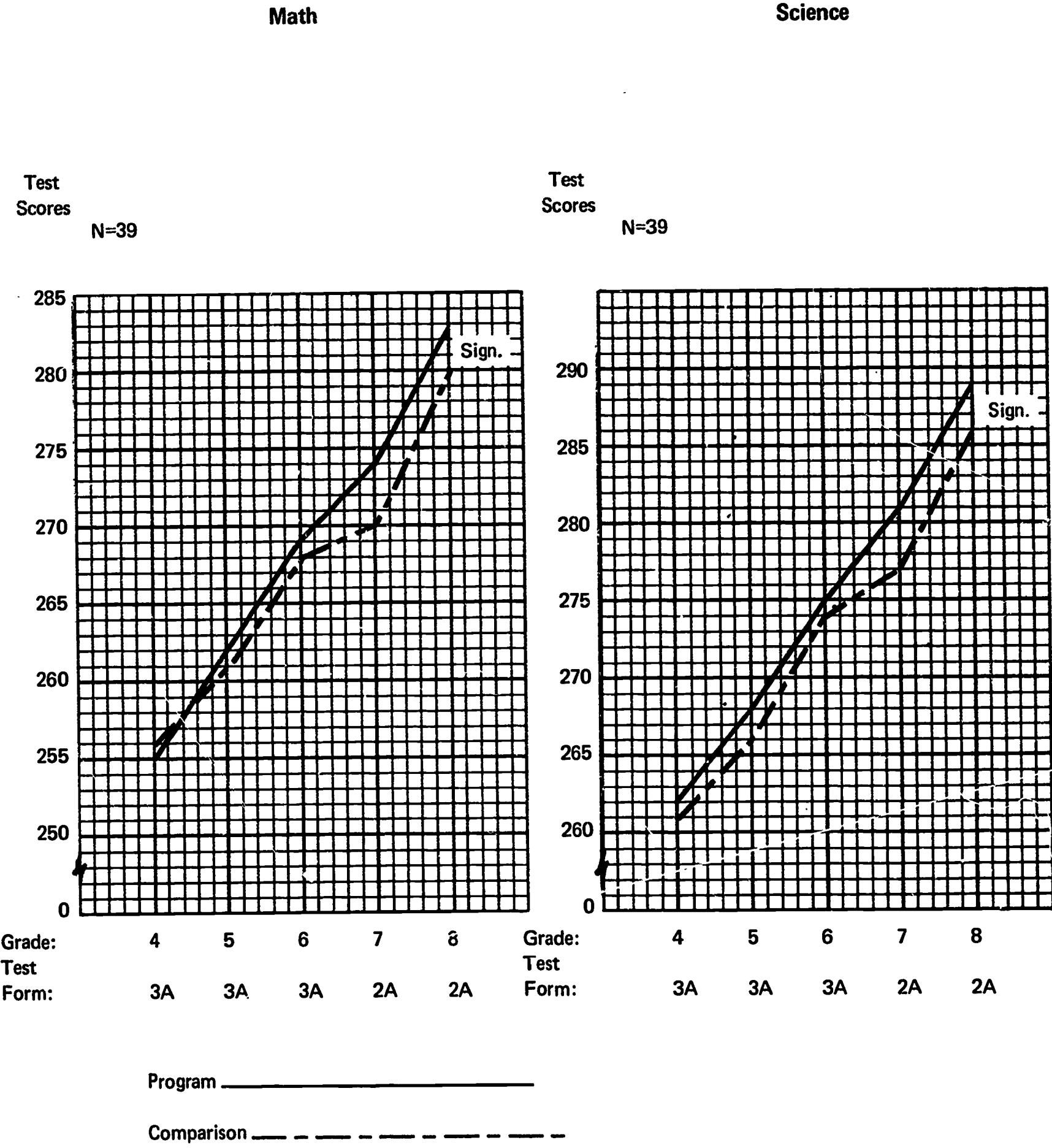


Figure 5.5 (Continued)

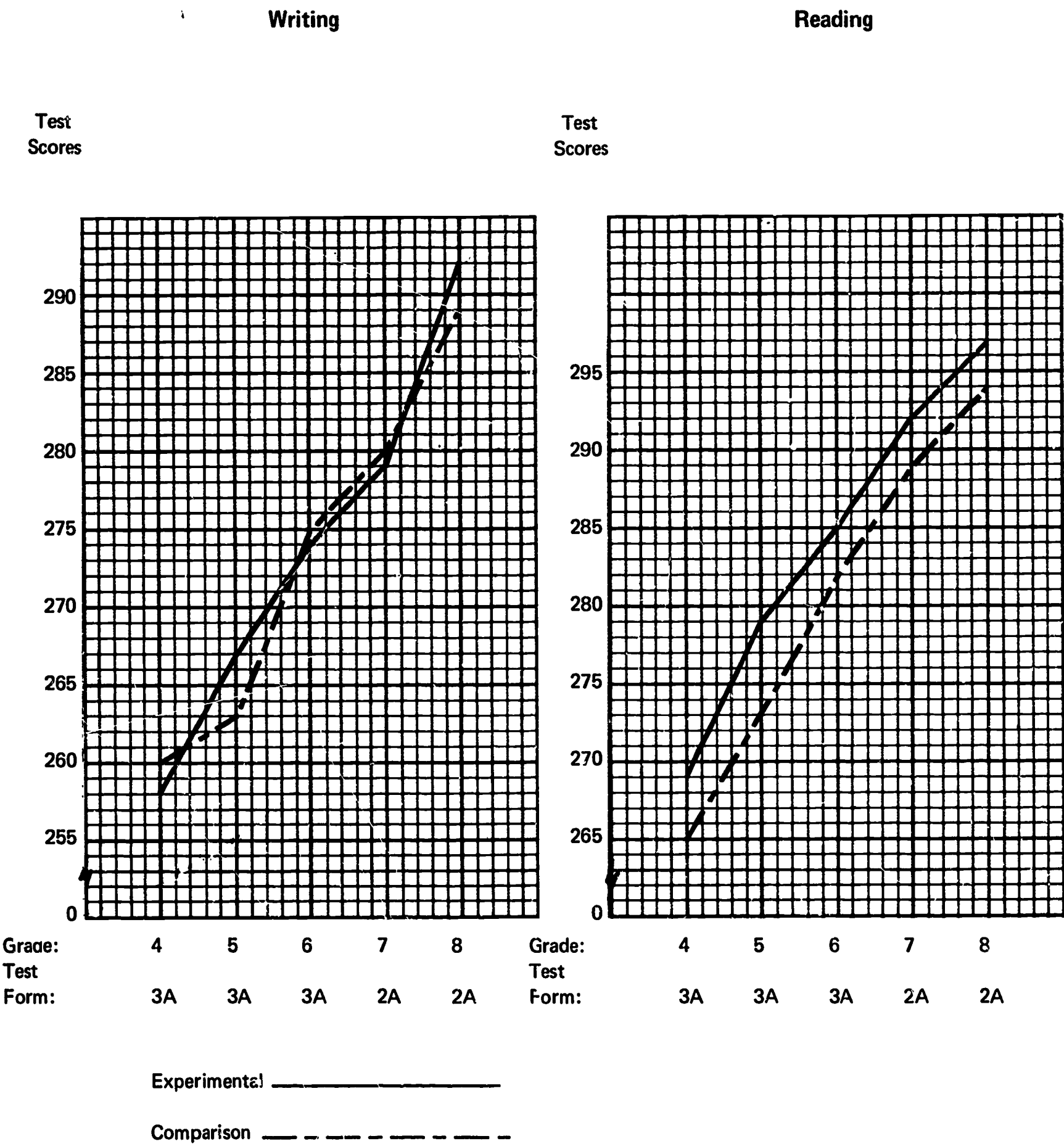


Figure 5.5 (Continued)

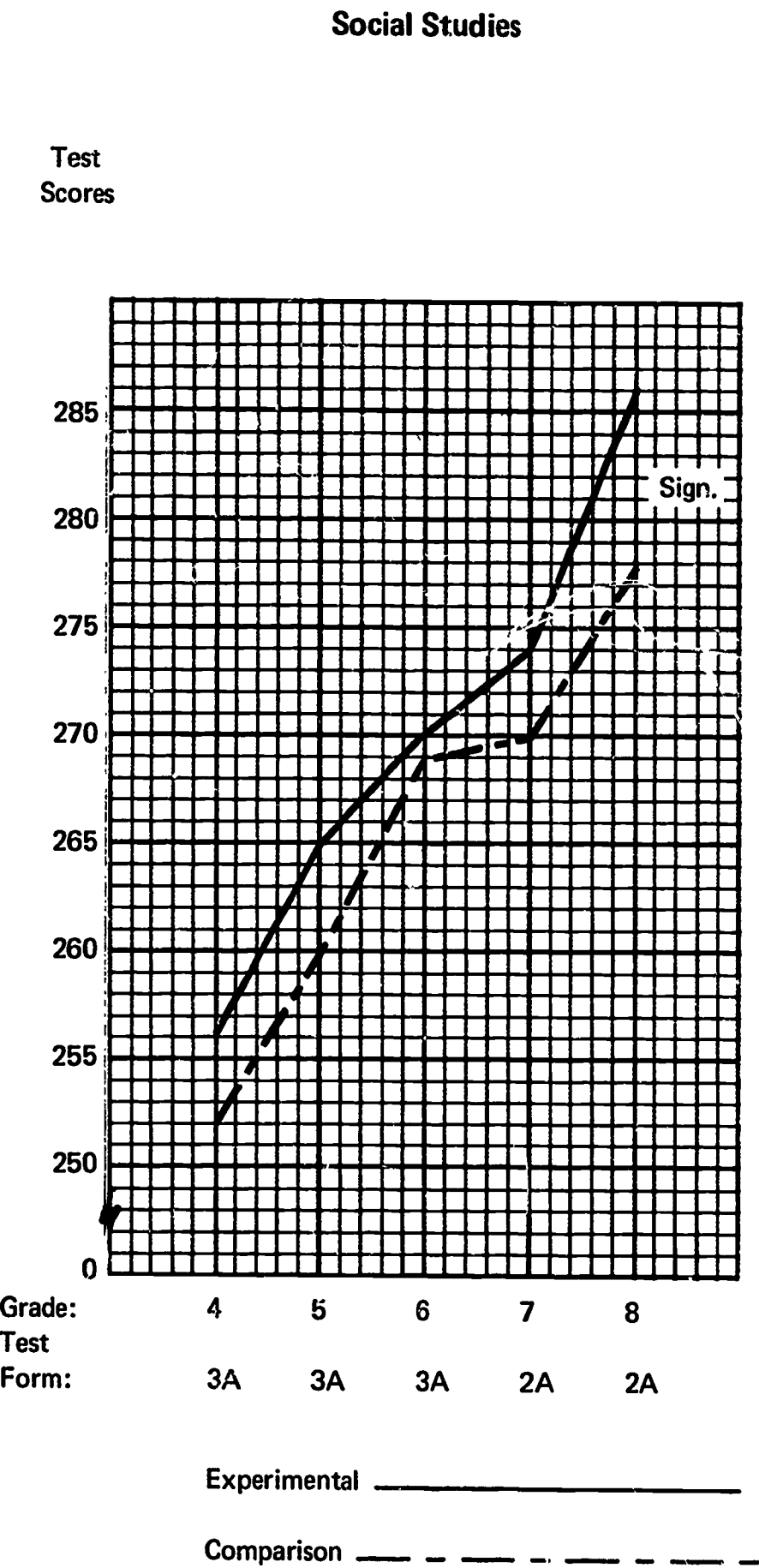


TABLE 5.18 SUMMARY OF TWO-WAY ANALYSES OF COVARIANCE BY TREATMENT
AND I.Q. LEVEL FOR ALL GROUPS, MATCH I AND II

Public Schools, Eighth Grade, Class of 1964-65 (N=44)				
Test	Comparison*	d.f.	F.	Significance
Math	Pro. vs. Comp	1,43	0.01	n.s.
	I.Q.	2,43	2.77	n.s.
	Interaction	2,43	0.064	n.s.
Science	Pro. vs. Comp.	1,43	0.37	n.s.
	I.Q.	2,43	0.87	n.s.
	Interaction	2,43	1.26	n.s.
Writing	Pro. vs. Comp.	1,43	0.28	n.s.
	I.Q.	2,43	0.24	n.s.
	Interaction	2,43	1.30	n.s.
Reading	Pro. vs. Comp.	1,43	-0.00	n.s.
	I.Q.	2,43	1.67	n.s.
	Interaction	2,43	1.12	n.s.
Soc. Stu.	Pro. vs. Comp.	1,43	4.37	.05
	I.Q.	2,43	1.04	n.s.
	Interaction	2,43	3.50	.05
<hr/>				
*	d.f.	p=.10	p=.05	p=.01
	1,43	2.84	4.07	7.27
	2,43	2.45	3.22	5.15

TABLE 5.18A PUBLIC SCHOOLS, SEVENTH GRADE, CLASS OF 1965-66 (N=58)

Test	Comparison*	d.f.	F.	Significance
Math	Pro. vs. Comp.	1,57	0.12	n.s.
	I.Q.	2,57	0.39	n.s.
	Interaction	2,57	0.14	n.s.
Science	Pro. vs. Comp.	1,57	7.49	.01
	I.Q.	2,57	4.13	.05
	Interaction	2,57	0.75	n.s.
Writing	Pro. vs. Comp.	1,57	0.00	n.s.
	I.Q.	2,57	0.35	n.s.
	Interaction	2,57	1.21	n.s.
Reading	Pro. vs. Comp.	1,57	0.34	n.s.
	I.Q.	2,57	0.51	n.s.
	Interaction	2,57	0.78	n.s.
Soc. Stu.	Pro. vs. Comp.	1,57	1.79	n.s.
	I.Q.	2,57	1.09	n.s.
	Interaction	2,57	0.53	n.s.
<hr/>				
*	d.f.	p=.10	p=.05	p=.01
	1,57	2.80	4.02	7.12
	2,57	2.40	3.17	5.01

TABLE 5.18B CATHOLIC SCHOOLS, EIGHTH GRADE, CLASS OF 1964-65 (N=13)

Test	Comparison*	d.f.	F.	Significance
Math	Pro. vs. Comp.	1,12	2.05	n.s.
	I.Q.	1,12	2.41	n.s.
	Interaction	1,12	0.30	n.s.
Science	Pro. vs. Comp.	1,12	0.08	n.s.
	I.Q.	1,12	1.81	n.s.
	Interaction	1,12	0.14	n.s.
Writing	Pro. vs. Comp.	1,12	1.28	n.s.
	I.Q.	1,12	0.83	n.s.
	Interaction	1,12	1.28	n.s.
Reading	Pro. vs. Comp.	1,12	0.36	n.s.
	I.Q.	1,12	0.07	n.s.
	Interaction	1,12	3.06	n.s.
Soc. Stu.	Pro. vs. Comp.	1,12	2.66	n.s.
	I.Q.	1,12	0.01	n.s.
	Interaction	1,12	1.37	n.s.
*	d.f.	p=.10	p=.05	p=.01
	1,12	3.18	4.75	9.33

TABLE 5.18C CATHOLIC SCHOOLS, SEVENTH GRADE, CLASS OF 1965-66 (N=32)

Test	Comparison*	d.f.	F.	Significance
Math	Pro. vs. Comp.	1,31	0.63	n.s.
	I.Q.	2,31	2.99	n.s.
	Interaction	2,31	4.73	.05
Science	Pro. vs. Comp.	1,31	3.74	.05 - .10
	I.Q.	2,31	0.12	n.s.
	Interaction	2,31	0.02	n.s.
Writing	Pro. vs. Comp.	1,31	0.43	n.s.
	I.Q.	2,31	2.33	n.s.
	Interaction	2,31	0.16	n.s.
Reading	Pro. vs. Comp.	1,31	1.88	n.s.
	I.Q.	2,31	2.36	n.s.
	Interaction	2,31	1.51	n.s.
Soc. Stu.	Pro. vs. Comp.	1,31	2.05	n.s.
	I.Q.	2,31	1.49	n.s.
	Interaction	2,31	2.65	.05 - .10
*	d.f.	p=.10	p=.05	p=.01
	1,31	2.88	4.17	7.53
	2,31	2.49	3.30	6.34

In this analysis, there were two statistically significant differences by I.Q. level and three interaction effects. There appeared to be no substantial relation between I.Q. and achievement, nor between I.Q. and treatment when the strictest test was used.

Tables 5.19 through 5.19C presents the results of the same kind of analysis using all the students in each group, matched only on I.Q. and sex (Match III).

TABLE 5.19 SUMMARY OF TWO-WAY ANALYSES OF COVARIANCE BY
TREATMENT AND I.Q. LEVEL FOR
PUBLIC SCHOOLS, EIGHTH GRADE, CLASS OF 1964-65 (N=72)

Test	Comparison*	d.f.	F.	Significance
Math	Pro. vs. Comp.	1,71	2.07	n.s.
	I.Q.	2,71	2.91	.05 - .10
	Interaction	2,71	0.41	n.s.
Science	Pro. vs. Comp.	1,71	0.21	n.s.
	I.Q.	2,71	0.98	n.s.
	Interaction	2,71	1.96	n.s.
Writing	Pro. vs. Comp.	1,71	1.14	n.s.
	I.Q.	2,71	0.25	n.s.
	Interaction	2,71	0.88	n.s.
Reading	Pro. vs. Comp.	1,71	0.14	n.s.
	I.Q.	2,71	0.64	n.s.
	Interaction	2,71	1.07	n.s.
Soc. Stu.	Pro. vs. Comp.	1,71	4.46	.05
	I.Q.	2,71	2.33	n.s.
	Interaction	2,71	1.98	n.s.

* d.f. = 1,71; p (.10) = 2.78; p (.05) = 3.99; p (.01) = 7.06
2,71; p (.10) = 2.38; p (.05) = 3.14; p (.01) = 4.96

TABLE 5.19A PUBLIC SCHOOLS, SEVENTH GRADE, CLASS OF 1965-66 (N=82)

Test	Comparison*	d.f.	F.	Significance
Math	Pro. vs. Comp.	1,81	0.44	n.s.
	I.Q.	2,81	0.83	n.s.
	Interaction	2,81	0.01	n.s.
Science	Pro. vs. Comp.	1,81	4.38	.05
	I.Q.	2,81	4.51	.05
	Interaction	2,81	1.19	n.s.
Writing	Pro. vs. Comp.	1,81	0.14	n.s.
	I.Q.	2,81	0.51	n.s.
	Interaction	2,81	1.18	n.s.
Reading	Pro. vs. Comp.	1,81	0.22	n.s.
	I.Q.	2,81	0.40	n.s.
	Interaction	2,81	0.67	n.s.
Soc. Stu.	Pro. vs. Comp.	1,81	1.05	n.s.
	I.Q.	2,81	0.65	n.s.
	Interaction	2,81	0.51	n.s.

* d.f. = 1,81; p (.10) = 2.78; p (.05) = 3.98; p (.01) = 7.04
2,81; p (.10) = 2.38; p (.05) = 3.13; p (.01) = 4.92

TABLE 5.19B CATHOLIC SCHOOLS, EIGHTH GRADE, CLASS OF 1964-65 (N=50)

Test	Comparison*	d.f.	F.	Significance
Math	Pro. vs. Comp.	1,49	4.39	.05
	I.Q.	2,49	1.46	n.s.
	Interaction	2,49	0.29	n.s.
Science	Pro. vs. Comp.	1,49	6.23	.01 - .05
	I.Q.	2,49	0.49	n.s.
	Interaction	2,49	1.25	n.s.
Writing	Pro. vs. Comp.	1,49	1.19	n.s.
	I.Q.	2,49	0.41	n.s.
	Interaction	2,49	0.61	n.s.
Reading	Pro. vs. Comp.	1,49	2.12	n.s.
	I.Q.	2,49	1.18	n.s.
	Interaction	2,49	4.27	.01 - .05
Soc. Stu.	Pro. vs. Comp.	1,49	0.00*	n.s.
	I.Q.	2,49	0.27	n.s.
	Interaction	2,49	1.37	n.s.

* One person in one cell

d.f. 1,49: $p(.10) = 2.83$; $p(.05) = 4.05$; $p(.01) = 7.21$
 2,49: $p(.10) = 2.43$; $p(.05) = 3.21$; $p(.01) = 5.13$

TABLE 5.19C CATHOLIC SCHOOLS, SEVENTH GRADE, CLASS OF 1965-66 (N=58)

Test	Comparison	d.f.	F.	Significance
Math	Pro. vs. Comp.	1,57	3.81	.05 - .10
	I.Q.	2,57	1.63	n.s.
	Interaction	2,57	3.56	.01 - .05
Science	Pro. vs. Comp.	1,57	6.35	.01 - .05
	I.Q.	2,57	0.07	n.s.
	Interaction	2,57	0.74	n.s.
Writing	Pro. vs. Comp.	1,57	6.46	.01 - .05
	I.Q.	2,57	2.86	.05 - .10
	Interaction	2,57	0.84	n.s.
Reading	Pro. vs. Comp.	1,57	6.75	.01 - .05
	I.Q.	2,57	3.55	.05
	Interaction	2,57	1.50	n.s.
Soc. Stu.	Pro. vs. Comp.	1,57	6.72	.01 - .05
	I.Q.	2,57	0.33	n.s.
	Interaction	2,57	1.03	n.s.

d.f. 1,57: $p(.10) = 2.79$; $p(.05) = 4.02$; $p(.01) = 7.13$
 2,57: $p(.10) = 2.38$; $p(.05) = 3.17$; $p(.01) = 5.02$

FOREIGN LANGUAGE TESTING

All of the program pupils in the study participated in a special foreign language program. While the students who are the subject of this report, studied French, German was also being offered. The classes consisted of a daily thirty minute period, and emphasized the audio-lingual approach in the fourth and fifth grades and grammatical and vocabulary mastery in the sixth through eighth grades. At completion of each school year, the Common Concepts Foreign Language test was administered in all classes in order to measure the language proficiency of the pupils.

The test results are presented in tables 5.21 and 5.22. They indicate that the pupils mastered a foreign language at the first year high school level. The present ninth grade had approximately one-half of its class admitted to third year high school German and with two exceptions, the balance to second year status.

TABLE 5.21 MEANS AND STANDARD DEVIATIONS FOR PROGRAM PUPILS ON FOREIGN LANGUAGE TESTS, CLASS OF 1964-65

Item	<u>MEANS</u>					<u>STANDARD DEVIATION</u>			
	<u>Public</u>		<u>Catholic</u>		<u>Public</u>		<u>Catholic</u>		
	Grade:	Four	Seven	Four	Seven	Four	Seven	Four	Seven
1	2	3	4	5	6	7	8	9	
Test Scores (Form 2)	30.5	48.6	34.2	47.1	4.3	5.5	4.9	16.5	
Junior High School Test Norms *	38.7				7.9				

Source: California Test Bureau. "Common Concepts Foreign Language Test." 1964.

* The test norms are not based on "gifted" programs, but on random samples.

TABLE 5.22 MEANS AND STANDARD DEVIATIONS FOR PROGRAM PUPILS ON FOREIGN LANGUAGE TESTS, CLASS OF 1965-66

Item	<u>MEANS</u>				<u>STANDARD DEVIATION</u>			
	<u>Public</u>		<u>Catholic</u>		<u>Public</u>		<u>Catholic</u>	
	Grade:	Four	Seven	Four	Seven	Four	Seven	Four	Seven
1	2	3	4	5	6	7	8	9
Test Scores (Form 2)	30.8	44.5	34.9	53.0	4.2	9.4	4.9	15.2
Junoir High School Test Norms*	38.7				7.9			

Source: California Test Bureau. "Common Concepts Foreign Language Test." 1964.

* The test norms are not based on "gifted" programs but on random samples.

GENERAL SUMMARY AND CONCLUSION

One problem in the use of standardized tests was the realization that the very bright children in the comparison group would probably have two to three times as much time to work on basic curriculum as the bright program children. The regular achievement tests could in no way measure the extra work of the program pupils in such areas as foreign language, economics and in extra individual projects. Thus two groups of equally brilliant children were tested only on basic curriculum coverage despite the fact that the comparison group spent considerably more time in mastering the same subject matter.

Had the program children scored even as high as the comparison group on regular achievement tests, the investigators were prepared to state that such performance was acceptable though not expected.

Despite the differences in time spent and the above statement about the acceptability of similar performances, the program children actually showed superiority to the comparison group. These results were such overwhelming evidence of the program's worth that little else needed to be added about the pupils' tested academic performances. Achievement in writing, spelling, and grammatical use are described in the following chapter.

CHAPTER VI

DEVELOPMENT AS MEASURED BY DESCRIPTIVE INSTRUMENTS

The evaluation of the growth of children intellectually, emotionally, and socially does not lend itself to objective measures. It is difficult, if not impossible, to obtain accurate and completely valid data for such factors. Through observation by individuals trained for such work, the ratings by teachers, and the pupils' stated concept of himself, measures are secured which are usually about as precise as may be obtained. Although such data may be converted to numerical values, difference between program and comparison groups may be minor. However, findings in which one group appears to have made better gains than the other group, if there is a consistent trend the consistency tends to make possible come valid conclusions.

The following pages deal with the evaluation of essays, teacher ratings, interview data, teachers' unsolicited statements, and reading records. The techniques and instruments employed in the collection of these data are given in Chapter IV.

On the essays written by pupils, the program children of the public schools tended to score significantly higher (5% level or better) than the comparison groups on the over-all evaluation of the essays and seventh graders used significantly (1% level) more words. No significant differences occurred in terms of spelling and grammatical errors. For more details, see Tables 6.1 through 6.4.

For the Catholic School pupils both seventh and eighth graders showed a significant difference (1% level) in spelling errors in favor of the program groups. The seventh graders also showed a significant difference in terms of score (1% level) and grammatical errors (2% level). For a statistical analysis see Tables 6.1 through 6.4.

TABLE 6.1
SIGNIFICANCE OF DIFFERENCE OF ESSAY TEST SCORES
FOR PUBLIC EIGHTH GRADE PUPILS

Item (N=39)	Program M. S.D.		Comparison M. S.D.		t-test	Significance
1	2	3	4	5	6	7
Categories						
Score (6=high)	3.7	.9	2.5	.8	7.131	.001
No. of words	203.2	66.5	199.1	63.1	.278	n.s.
Spell. errors	2.5	2.7	4.0	6.7	-1.256	n.s.
Grammar errors	4.4	3.4	5.0	4.7	-.688	n.s.

TABLE 6.2
SIGNIFICANCE OF DIFFERENCE OF ESSAY TEST SCORES
FOR PUBLIC SEVENTH GRADE PUPILS

Item (N=47)	Program M. S.D.		Comparison M. S.D.		t-test	Significance
1	2	3	4	5	6	7
Categories						
Score (6=high)	2.7	1.0	2.2	.9	2.046	.05
No. of words	235.1	103.8	158.3	67.2	4.550	.001
Spell. errors	1.7	1.7	2.5	2.3	-1.893	n.s.
Grammar errors	6.4	6.2	4.9	4.0	1.562	n.s.

TABLE 6.3
SIGNIFICANCE OF DIFFERENCE OF ESSAY TEST SCORES
FOR CATHOLIC EIGHTH GRADE PUPILS

Item (N=32)	Program		Comparison		t-test	Significance
	M.	S.D.	M.	S.D.		
1	2	3	4	5	6	7
Categories						
Score (6=high)	2.7	.8	2.8	1.1	-.122	n.s.
No. of words	154.3	42.3	179.6	87.2	-1.574	n.s.
Spell. errors	1.2	1.5	3.0	2.8	-3.469	.01
Grammar errors	4.4	3.1	4.3	3.3	.071	n.s.

TABLE 6.4
SIGNIFICANCE OF DIFFERENCE OF ESSAY TEST SCORES
FOR CATHOLIC SEVENTH GRADE PUPILS

Item (N=32)	Program		Comparison		t-test	Significance
	M.	S.D.	M.	S.D.		
1	2	3	4	5	6	7
Categories						
Score (6=high)	3.1	.7	2.2	.8	5.593	.001
No. of words	138.6	47.1	135.4	41.3	.300	n.s.
Spell. errors	1.0	1.3	2.8	2.3	-3.714	.001
Grammar errors	3.4	3.0	5.2	2.9	-2.485	.02

The teachers were asked (both those for the program and comparison classes) to rate the gifted pupils on eight items. One weakness of this technique is that the teachers were apt to compare the pupil being rated with other pupils in the class. The program pupil would therefore have stronger competition than the gifted child in a normal class. No attempt was made to determine the statistical significance of the differences in the means of the groups. The summary of the results are given below. For means of ratings see Table VI.1 in Appendix C. Where the program group mean exceeded that of the comparison group it is indicated by an "X," no differences by an "O," and when in favor of the comparison group by a "-."

	Eighth Grade		Seventh Grade	
	Public	Catholic	Public	Catholic
1. Cooperation	X	X	X	-
2. Delegates' responsibility	X	X	X	-
3. Encourages and leads group	X	X	-	-
4. Applies abstract principles	X	X	O	-
5. Appreciates ideas and efforts of others	X	X	-	-
6. Chosen by peers for social group	X	X	X	-
7. Interested in understanding people	X	X	X	-
8. Brings relevant material to school	X	X	-	-

The above data indicate a strong trend in the eighth grade (though the differences in the means are often small) for the program group to be superior in the positive attributes rated even though their competition was more rigorous. It is difficult to explain the consistent superiority of the Catholic comparison groups. For a more detailed presentation, see Table VI.1.

As noted in Chapter IV the program and comparison pupils kept records of their reading for a one-year period. The materials read were categorized and the number of books read by the pupils in each group determined. As a further refinement of these data the percent of pupils reporting was also determined. Tables 6.5 and 6.6 show in parentheses the percent of children in each group reporting what they have read and the number outside the parentheses indicates the total number of books. It is evident from these tables that not only more public program pupils reported doing reading than did the comparison pupils but also that they read more. The results are not quite as evident for the Catholic pupils, but in certain areas of reading the same conclusion would be supported by the data.

TABLE 6.5

READING RECORDS OF PUBLIC PUPILS

Areas	Eighth Graders when in Seventh Grade No. of Books Read				Seventh Graders when in Sixth Grade No. of Books Read			
	Program		Comparison		Program		Comparison	
1	2	3	4	5	6	7	8	9
Hero, folk and fairy tales	132	(83%)*	39	(68%)	173	(83%)*	128	(82%)*
Animal	122	(78)	33	(43)	174	(83)	68	(55)
Family, school and career	49	(49)	19	(43)	127	(85)	52	(47)
Biography	229	(92)	73	(86)	303	(100)	138	(84)
Other times	229	(83)	60	(50)	233	(93)	132	(76)
World Today	48	(57)	30	(50)	142	(87)	158	(87)
Adventure	43	(35)	26	(36)	131	(70)	46	(37)
Mystery	187	(83)	21	(39)	129	(70)	54	(55)
Fun and Nonsense	16	(30)	9	(11)	70	(70)	13	(24)
Sports and Hobbies	27	(43)	13	(29)	80	(59)	41	(50)
Science	62	(46)	52	(71)	122	(67)	98	(74)
Poetry and Plays	222	(54)	45	(50)	232	(74)	99	(60)

* Columns give the percent of the pupils in each group reporting books read, i.e., 83% of the seventh grade program group read 132 books on Hero, folk, and fairy tales.

TABLE 6.6 READING RECORDS OF CATHOLIC PUPILS

Areas	Eighth Graders when in Seventh Grade No. of Books Read				Seventh Graders when in Sixth Grade No. of Books Read			
	Program		Comparison		Program		Comparison	
	1	2	3	4	5	6	7	8	9
Hero, folk, and fairy tales	43	(100%)*	47	(67%)*	166	(77%)*	87	(84%)*
Animal	44	(69)	46	(78)	146	(90)	96	(84)
Family, school, and career	13	(54)	14	(50)	66	(55)	57	(64)
Biography	55	(85)	79	(94)	236	(97)	93	(84)
Other times	84	(77)	45	(67)	204	(84)	128	(84)
World Today	21	(69)	19	(50)	185	(87)	76	(72)
Adventure	17	(38)	28	(67)	62	(32)	58	(68)
Mystery	11	(38)	34	(67)	175	(81)	45	(56)
Fun and Nonsense	9	(31)	14	(50)	27	(45)	20	(44)
Sports and Hobbies	10	(38)	36	(56)	67	(81)	80	(72)
Science	28	(54)	32	(56)	67	(65)	58	(52)
Poetry and Plays	37	(46)	37	(50)	201	(61)	89	(72)

* Columns give the percent of the pupils in each group reporting books read, i.e., 100% of the seventh grade program group read 43 books on Hero, folk, and fairy tales.

On rating scales, anecdotal records, student interviews, and miscellaneous reports, teachers commented on such items as pupil creativity, intellectual curiosity, analytical thinking, and other factors listed below. No statistical treatment of these data was attempted other than a tabulation of the number of times reference was made by the teacher to a particular characteristic. The following is a summary of tabulations made from anecdotal records. See Appendix C, Tables VI.2 through VI.7 for further breakdown of results.

Item	Eighth Grade				Seventh Grade			
	Public		Catholic		Public		Catholic	
	Pro.	Comp.	Pro.	Comp.	Pro.	Comp.	Pro.	Comp.
1. Creativity	21	7	26	22	50	51	23	10
2. Intellectual Curiosity	17	6	18	5	23	9	24	4
3. Analytical Thinking	17	6	24	3	13	9	14	3
4. Development of Interests	25	6	55	8	79	13	30	3
5. Self-Direction in Learning	22	4	24	3	34	4	28	5
6. Social Concern	39	0	43	0	60	0	37	0

Not only were the preceding factors identified in the anecdotal records in which the statements were teacher-initiated, but also records of pupil interviews were analyzed for evidence of intellectual curiosity and self-direction in learning. The ratings on pupil interviews are presented in Tables 6.7 through 6.10. No statistical technique was used to determine the significance of the differences in the ratings on these two factors.

TABLE 6.7 RATINGS OF PUPIL INTERVIEWS ON "INTELLECTUAL CURIOSITY"
Class of 1964-65

Item	<u>Percent of responses</u>							
	<u>Public</u>				<u>Catholic</u>			
	<u>Four</u>		<u>Eight</u>		<u>Four</u>		<u>Eight</u>	
	Prog.	Comp.	Prog.	Comp.	Prog.	Comp.	Prog.	Comp.
1	2	3	4	5	6	7	8	9
Ratings*								
High	3%	13%	10%	3%	6%	..%	6%	3%
Medium	54	47	74	59	38	60	59	87
Low	43	40	16	38	56	40	35	10
No rating .....	...	...	...	...	...	...	...	...
Total	100%	100%	100%	100%	100%	100%	100%	100%

* High rating: Evidence of going beyond usual work; outstanding.
Medium rating: Usual level of work.
Low rating: Below usual level of work.

TABLE 6.8 RATINGS OF PUPIL INTERVIEWS ON "INTELLECTUAL CURIOSITY"
Class of 1965-66

Item	<u>Percent of responses</u>							
	<u>Public</u>				<u>Catholic</u>			
	<u>Four</u>		<u>Eight</u>		<u>Four</u>		<u>Eight</u>	
	Prog.	Comp.	Prog.	Comp.	Prog.	Comp.	Prog.	Comp.
1	2	3	4	5	6	7	8	9
Ratings*								
High .....	..%	13%	2%	9%	7%	19%	13%	6%
Medium	68	68	79	74	63	34	84	69
Low	32	19	19	17	30	47	3	25
No rating .....	...	...	...	...	...	...	...	...
Total	100%	100%	100%	100%	100%	100%	100%	100%

* High rating: Evidence of going beyond usual work; outstanding.
Medium rating: Usual level of work.
Low rating: Below usual level of work.

TABLE 6.9 RATINGS OF PUPIL INTERVIEWS ON "SELF-DIRECTION IN LEARNING"
Class of 1964-65

Item	<u>Percent of responses</u>							
	<u>Public</u>				<u>Catholic</u>			
	<u>Four</u> Prog.	Comp.	<u>Eight</u> Prog.	Comp.	<u>Four</u> Prog.	Comp.	<u>Eight</u> Prog.	Comp.
1	2	3	4	5	6	7	8	9
Ratings*								
High	23%	26%	33%	13%	6%	13%	13+	3%
Medium	44	34	44	64	35	33	34	52
Low	33	40	23	23	59	54	53	45
No rating . . . . .	...	...	...	...	...	...	...	...
Total	100%	100%	100%	100%	100%	100%	100%	100%

* High rating: Evidence of going beyond usual work; outstanding.

Medium rating: Usual level of work.

Low rating: Below usual level of work.

TABLE 6.10 RATINGS OF PUPIL INTERVIEWS ON "SELF-DIRECTION IN LEARNING"
Class of 1965-66

Item	<u>Percent of responses</u>							
	<u>Public</u>				<u>Catholic</u>			
	<u>Four</u> Prog.	Comp.	<u>Eight</u> Prog.	Comp.	<u>Four</u> Prog.	Comp.	<u>Eight</u> Prog.	Comp.
1	2	3	4	5	6	7	8	9
Ratings*								
High	13%	21%	4%	4%	7%	16%	10%	6%
Medium	38	53	55	43	30	44	59	47
Low	49	26	41	53	63	40	31	47
No rating . . . . .	...	...	...	...	...	...	...	...
Total	100%	100%	100%	100%	100%	100%	100%	100%

* High ratings: Evidence of going beyond usual work; outstanding.

Medium rating: Usual level of work.

Low rating: Below usual level of work.

An examination of Tables 6.7 and 6.8 indicates that on the factor of intellectual curiosity, the program pupils showed a tendency to rate higher than did the comparison pupils; moreover, as the pupils progressed, the difference in the ratings on intellectual curiosity became more apparent: while the comparison pupils received lower ratings as they continued in the regular classrooms, the program pupils, subsequently, became more intellectually curious.

On the basis of the Tables 6.9 and 6.10 the program pupils tend to have higher ratings on the factor of "Self-Direction in Learning" and to increase these ratings on this factor as they progressed from the fourth to the seventh or eighth grades. Inversely the comparison pupils tended to receive lower ratings.

Summarizing the foregoing data, one can accept with a reasonably high degree of certainty that the program pupils in contrast to the comparison group tend to:

	<u>Public</u>	<u>Catholic</u>
1. Write better	X	X
2. Use more words in writing	X	
3. Have fewer spelling errors		X
4. Cooperate with others	X	X
5. Delegate responsibilities	X	X
6. Encourage and lead group	X	X
7. Creatively applies abstract principles	X	X
8. Appreciates ideas and efforts of others	X	X
9. Be chosen into social groups	X	X
10. Want to understand people	X	X
11. Bring relevant materials to class	X	X
12. Be more creative	X	X
13. Have more intellectual curiosity	X	X
14. Use analytical thinking	X	X
15. Develop more interests	X	X
16. Employ self-direction in learning	X	X
17. Have more social concern	X	X
18. Read more	X	
19. Prefer to read biographies, poetry, and plays	X	X

As previously stated, descriptive data are hard to objectify, but the consistent evidence of the superiority of one group over another provides a basis upon which conclusions can be drawn. The data above indicate consistent differences between the program and comparison groups and give credence to the conclusion that the program definitely had a positive effect upon the children.

CHAPTER VII

PUPIL OPINIONS, INTERESTS, SELF-APPRAISALS AND SOCIAL RELATIONSHIPS

One concern of this study was to gain insight into the interest patterns of academically able pupils in middle childhood. A first task was simply to ascertain what these children in this age period reported on a wide range of interest-oriented questions. A second was to determine the extent of difference, if any, between the interest patterns of academically able pupils who were enrolled in special classes and those who were enrolled in regular classes.

FAVORITE RECREATION OF PUPILS

The favorite recreation of the total sample of academically able pupils studied was to engage in active play. The extent of this choice was overwhelming; this response accounted for roughly 88% of all indicated preferences. When active play was divided into individual or group action play, the group play was more frequently mentioned than the individual activity. This same general dominance of active play as an interest persisted when the total sample of able pupils was separated into public school and Catholic school groups. It also characterized the total sample when separated into program and comparison groups. The only other recreations mentioned by as many as 5 percent of the pupil group were hobbies and reading. For tabular results see Tables VII. 1 and VII. 2, appendix D.

LEISURE TIME ACTIVITIES OF PUPILS

The academically able pupils were asked, as a further way of ascertaining interests, what they liked to do when there was nothing that they were required to do. Active play (both group and individual) and reading were the most frequently mentioned free-time choices. The preferences were true for program and comparison groups, and public and Catholic school groups. When their responses were separated into the categories of "superior," "very talented," and "talented," the same general pattern of choice persisted. Some shifts in order of ranking between active play and reading appeared, but in no consistent pattern. When used for purposes of interpretation one shift tended to be cancelled out by another in the opposite direction. Tabulated data is given in Appendix D, Tables VII. 3 and VII. 4.

FAVORITE T.V. PROGRAMS OF PUPILS

The favorite T.V. programs of this sample of academically able pupils were reported categorically as comedy, variety programs, and adventure programs. Many other types of programs were mentioned by these students, but much less frequently. (See Tables VII. 5 and VII. 6, appendix D). The pattern of preference held for program and comparison pupils as well as for public and Catholic school groups.

PARTS OF NEWSPAPERS READ BY PUPILS

As another check on interests the pupils were asked which parts of the newspaper they read most regularly. Viewed as a total sample, these children reported that they read the comics and special children's material most regularly, and front page and headline news and sports news next more regularly. (See Tables VII. 7 and VII. 8, appendix D). There were no appreciable or consistent differences revealed when the data were separated into program and comparison groups, or into public and Catholic school groups.

FAVORITE MAGAZINES OF PUPILS

As another indication of interest the pupils were asked to identify their favorite magazines. As a total sample they reported adult general interest magazines as their favorite, followed by children's magazines. This selection did not vary when the groups were separated into program and comparison classes, nor did it vary appreciably across public and Catholic school groups. (Tabulated data given in appendix D, Tables VII. 9 and VII. 10.

NAMES OF BEST LIKED BOOKS

All pupils were asked to report the names of the books read in a given year that they had liked best. Their responses were then placed into a number of broad general categories. (See Tables VII. 11 and VII. 12, appendix D). No classification dominated in their preferences. The categories into which the most books fell were mystery, other times and places, science and science fiction, biography and autobiography, and adventure. This pattern did not

vary appreciably across the program and comparison classes, nor between the public and Catholic school groups.

OUTSIDE SCHOOL ACTIVITIES OF PUPILS

It was felt that some information on the way in which pupils spent time outside of school, and the nature of the activities in which they engaged, would reveal data on interests. Thus, they were asked to report accordingly. As a total sample the most frequently mentioned outside activity was participating in clubs and other organizations. Next most frequently mentioned were music and dancing lessons.

There seems to be a general tendency for the interests of program pupils to have a decreased interest in clubs as they move from the sixth to the seventh grade and for the comparison group to show an increased interest. Interests in music and/or dancing seems to decrease for all groups during this period. (See appendix D, Tables VII. 13 and VII. 14).

SPORTS

Inquiry was made into sports preferences of these pupils. Responses revealed that nearly all of the pupils did have a favorite sport in which they liked to engage. Active group sports tended to be favored over active individual sports. No consistent differences were found between the program and comparison groups nor between the public and Catholic school groups. (See appendix D, Tables VII. 15 and VII. 16).

HOBBIES

Hobbies which the pupils pursued were viewed as another indicator of interests, and pupils were asked to respond to a question about such activities. (See appendix D, Tables VII. 17 and VII. 18). The largest number of hobbies fell into the category of collections; the next largest category was art work and crafts. These groups dominated the hobby data. This emphasis was true for the total sample, for all program and comparison groups analyzed, and any public and Catholic school group examined.

EDUCATIONAL AMBITIONS OF PUPILS

Questions which were designed to reveal the educational ambitions of this sample of academically able students were also asked. Seven to eight out of every ten of the pupils indicated an ambition to attend college. One to three out of ten indicated an ambition to go on to post-college work. This ambition did not appear to be appreciably different for program or comparison group pupils or for public and Catholic school children. (See appendix D, Tables VII. 19 and VII. 20).

VOCATIONAL AMBITIONS OF PUPILS

Pupils were queried about their vocational ambitions. Based on both written and interview responses, the following results emerged. (See appendix D, Tables VII. 21 and VII. 22). Pupils in the comparison classes were more apt to have a tentative vocational ambition than were pupils in the program classes. Where vocational ambitions were stated, they centered primarily in the professions, with space science as a strong but distant second preference. While a significant percentage of pupils in the Catholic classes did indicate religious vocational ambitions, almost no pupils in the public school classes exhibited such an interest.

VOCATIONAL CHOICE OF PARENTS FOR PUPILS

An attempt was made to see whether the parents of children with high academic ability had early vocational ambitions for them. Based on the total sample, from a half to three-fourths of the parents reported no vocational choices for their children. (See appendix D, Tables VII. 23 and VII. 24). These data did not seem to vary for program and comparison groups or for public and Catholic groups except in the one area of religious vocation.

HOW I HAVE CHANGED

An examination was conducted of how pupils might have seen themselves as changing as a result of being in the special class program. The pupils in the program groups, both in public and Catholic schools, were asked to

write an essay on the topic "How I have Changed." These essays were then analyzed for comments made, and similar statements were grouped together. (See Tables VII. 25 through VII.28). A very wide range of comments were made, but certain items tended to appear in the essays with greater frequency.

The public school program class members most frequently saw themselves changed in the following ways:

1. A better attitude toward school studies
2. More mature as a person
3. Enjoyed and gained from meeting new and interesting people
4. A greater liking for sports than before

The Catholic school program class members most frequently mentioned:

1. Like my subjects better; they have more meaning
2. Have met new and interesting friends
3. Had a chance to have better teachers
4. Have worked harder; my grades have improved

Specific kinds of statements made by students in these essays were revealing and interesting. Some samples are reported below.

Group I - Public Program

Before I entered the program I would get very upset if I couldn't understand something or had too much homework. I have found now that this does no good at all. It only wastes precious time that I could use more wisely by asking questions or getting a little bit more done.

The subjects I like a lot better because we are getting away from the books and doing much more interesting things.

My personality as a whole has changed. The way I react with fellow students, the hobbies and sports I like and the kind of people I spend my time with.

I've lost some of my shyness in working with others, and can express myself to my utmost now. In all, I've gained confidence in myself and explored regions which before I've left unexplored. I feel I'm a better person because of this program.

Group I - Catholic Program

I've met many new friends from all over the Peoria area. I've become more aware of the world around me. Many new, interesting ideas have been put into my head.

For a long period of time before I came to the special class absolutely nothing was exciting. Everything was just the same old routine. Then bang! Tests and a new classroom and new friends and teachers.

SOCIAL RELATIONSHIPS, SOCIAL CONCERN AND SELF-PERCEPTION

Pupils in the study were asked how they would like to be changed, if that were indeed possible. (See Tables VII. 29 through VII. 36). Their responses are of interest along the following two dimensions:

1. What is the change?
2. Where change would be welcomed what is its nature of direction?

On the first question, considering the eighth grade group, the public comparison and Catholic comparison groups showed the greatest percentage of responses on the "no change desired" line. Considering the seventh grade group, public program and comparison groups reported on the "no change" line as a second highest percentage of responses. The Catholic groups reported it as a third rank percentage in the program group and a second rank in the comparison group.

The public school program groups were most concerned about change that centered on:

1. Change in personal appearance, or age, or sex
2. Change in mental ability
3. Change in physical ability and health

The public school comparison groups showed the same list of change items.

The Catholic school program groups were most concerned about change that centered on:

1. Change in personal appearance, or age, or sex
2. Change in physical ability and health

The Catholic school comparison groups showed about the same preferences. Perhaps the most engaging trend in this particular item of information has to do with the change-no change data. As the reports from the eighth and seventh grade groups are balanced against the information they reported over the previous four years, two things are apparent. First, the program groups tended to see more reasons to change as the years went by; the comparison groups saw less reason to change. Second, the "Superior" students saw more reasons to change; the "Talented" saw less reason to change. One can only speculate on the meaning of this contrast. It may be that being in the program classes caused those pupils to be less satisfied with themselves over the years as they came to understand and reflect on the strengths of their classmates. It may be, in the case of the comparison groups, that being in a mixed class contributed to the personal security of the able student causing him to be more satisfied with himself and less apt to see a need for change in himself. Similarly, it may be that the more able the child the less satisfied he was with himself and his performance. The data allowed both of these speculative statements to be made.

Further inquiry on this matter is in order.

MOST WANTED WISHES OF PUPILS

Wishes of people have long been a key to their personal aspirations and their views of the world. Thus, in this study the pupils were asked to report on their most wanted wish. (See appendix D, Tables VII. 37 and VII. 38). When the eighth and seventh grade groups were in fourth and fifth grades, their most wanted wish was for material things for themselves. This choice did not remain their most wanted wish, though it remained a major one. At the same time, concern for provision and condition of others increased greatly, indicating perhaps a growing sense of social concern. This shift was evident across both the program and comparison groups and the public and Catholic school groups. Also, the shift in concern was somewhat greater for the program groups than it was for the comparison groups even though the patterns in the data are not without variance.

BEST THING THAT EVER HAPPENED TO ME

One way to observe the development of empathy for others is to get some emotional reaction from the pupils about the goodness or badness of certain events in their lives. Thus, these able pupils were asked to report on the best thing that ever happened to them. (See appendix D, Tables VII. 39 and VII. 40).

For all groups, when they were in the fourth and fifth grades, the categories "going places" and "getting things" accounted for approximately 50 percent of the responses. These categories continued to account for from 20 to 40 percent of their responses in grades seven and eight respectively. There was a great increase over these years in the percentage of responses that centered on the category "intellectual accomplishment," especially in the public and Catholic program classes. Responses in grades four and five were at about the 12 percent level; in grades seven and eight they were at the 28-30 percent level. During this same period the shift in public comparison group information was from about 5 to 7 percent on the same item. The Catholic program classes responded at grades four and five at about the 25 percent level and increased this level to 30 percent by grades seven and eight respectively. The Catholic comparison groups reported originally at about the 7 percent level and increased this level to about 15 percent by grades seven and eight. When viewed from the expressed purposes of this project, this information is engaging.

WORST THING THAT EVER HAPPENED TO ME

All the pupils were asked to report on the worst thing that ever happened to them. The most frequent responses for all groups, program and comparison, fell into the category "personal injury and personal fears." (Appendix D, Tables VII. 41 and VII. 42). The next most frequent was the category "family problems," the third was the category "none." This pattern did not change when examined against groupings of superior, very talented, and talented pupils.

GREATEST LIKES OF PUPILS

When asked about their greatest likes, pupils in all groups put the highest value on their families and on family-centered activities. (See appendix D, Tables VII. 43 and VII. 44). At the same time they mentioned a long and varied list of other likes. In fact, the category "others" which was used as a place to record this variety was the place where a high percentage of responses fell.

GREATEST DISLIKES OF PUPILS

When asked about their greatest dislikes, pupils again reported on a wide and extremely varied set of objects and occurrences. The largest single category of "dislikes" was made up of seldom repeated but frequently mentioned events. (See appendix D, Tables VII. 45 and VII. 46). The largest number of specific responses fell into the categories of "Certain kinds of people" and "Family Situations." This pattern of responses did not change across program and comparison groups, or across public and Catholic school groups.

SUMMARY

Throughout this chapter analyses of the interests, self-appraisals and social relationships of program and comparison pupils in both the public and Catholic schools have been presented. The general picture indicates few significant differences in terms of play activities, participation in organizations, sports and hobbies, although there was considerable variation in some areas when the pupils were categorized into "superior," "very talented," and "talented" groups. The program pupils developed greater social concern and desire to improve themselves than did the comparison pupils; moreover, they indicated that the best thing that had happened to them was the gaining of intellectual experiences. Throughout the analyses, however, it is clear that the stereotype of the gifted pupil as an isolate and a person of narrow interests must be rejected.

Opinions of parents about their children and about the effectiveness of the program are presented in the following chapter.

CHAPTER VIII

PARENT OPINIONS

Educational programs may be highly effective, may receive endorsement by pupils, by teachers, and by school administrators, but they are not likely to be developed and supported unless parental opinions toward them are favorable. In previous chapters evidence has been presented to show that desirable outcomes of the program appeared, that children looked upon it favorably, and that teachers generally considered it to be effective. Parental attitudes toward the program their children attended are presented in this chapter.

Eighty-eight percent of the parents of seventh and eighth grade pupils in the gifted classes responded to a letter requesting them to cite the advantages and disadvantages of the program as they saw them. The twelve percent who did not respond could not be differentiated according to the intellectual level of their children, nor by any particular socio-economic, public, or Catholic school group. Study of previous questionnaires and teacher-conference reports indicated that the non-responders had not expressed negative attitudes toward the program; and although the reasons for their failure to respond is not apparent, it cannot be assumed that failure to reply to questionnaires indicated dissatisfaction with the program.

ADVANTAGES

The data in Table 8.1 are the percentages of all the responses made by all the parents who cited advantages of the program. Since parents could cite more than one advantage, the figures represent percentage of responses, not the percentage of parents answering the questionnaire. The data suggests that the parents generally expressed a favorable reaction to the program.

TABLE 8.1 ADVANTAGES OF THE GIFTED PROGRAM CITED BY PARENTS

Advantages	Percent of Parents' Responses*		
	Public %	Catholic %	Total %
Stimulating and challenging	58	76	64
Enrichment by projects, visitors, research	44	41	43
Faster pupils progress	40	41	40
Foreign language offered	37	15	29
Developed responsibility and self-reliance	20	37	26
Excellent teachers	16	29	21
Broadened children's interests	14	25	18
Provided for personal attention	10	32	12
Offered good foundation for future education	14	3	10
Developed new cross-town friendships	8	14	10
Offered good facilities and materials	4	2	6
Miscellaneous (better discipline, leadership development, extra activities, particular values for own child, etc	11	25	16

* Percentages rounded off to nearest whole number. One hundred and six public and fifty-nine catholic parents of pupils responded. Since parents could give more than one response the percentages do not total 100.

The categories in the table were drawn from free responses and they are not mutually exclusive. If some grouping of the items is made, it may be seen that a vast majority of the responses were found in the general category of stimulation, enrichment, and acceleration, and further noted that there was less mention of the characteristics of teachers, pupils, and facilities. Since reports were favorable on some of the former items, it may be assumed that parents implied that they considered them desirable influences on the development of their children. The data seems to indicate that the parents held a high opinion of the value of the program. Some interesting differences existed in responses by parents of children in the Catholic and public schools. As an example, differences appeared on those questions dealing with the offering of a foreign language, quality of teachers, and provisions for personal attention.

A breakdown of the parent responses by ability level of the pupils indicated a general trend of parents of higher performing students to show slightly more favorable attitudes. The greatest differences among parents of children so classified were found in the categories of challenging, enrichment, foreign language offering, and the development of self-reliance and responsibility. The differences in other categories were so small that they cannot be considered

as important indicators of attitude differences. In general, therefore, the data seem to indicate favorable attitudes toward the program with a slight tendency for parents of higher level pupils to respond more favorably than did the parents of children in the other groups.

DISADVANTAGES

Unfavorable attitudes of parents indicated in their free responses to an invitation to comment on the gifted program were categorized under the headings noted in Table 8.2. Some important differences between parents of pupils in Catholic and public school are apparent in the categories of transportation arrangements; feelings of separation in the new school (fewer for Catholic school pupils since they were in a school composed almost entirely of classes for the gifted); tuition and expense (additional tuition was charged for Catholic school gifted classes); excessive pressure and competition; excessive homework and busy work; weak programs in physical education, music, and art; unsatisfactory teaching; and undesirable labeling as gifted. In the first of three categories noted, there was enough mention and enough difference to suggest that one-quarter to one-third of the Catholic school parents saw these matters as serious disadvantages of the program. In the other categories the relatively infrequent statements by both Catholic and public school parents suggest that the disadvantages indicated were not of major consequence.

TABLE 8.2 DISADVANTAGES OF THE GIFTED PROGRAM REPORTED BY PARENTS

Disadvantages	Percent of Parent Responses*		
	Public %	Catholic %	Total %
Transportation arrangements	30	17	25
Isolation from neighborhood friends	31	28	22
Pupils felt separated in new school	19	5	14
Added tuition and expense	4	30	13
Excessive pressure and competition	15	7	12
Excessive homework and busy work	14	3	10
Weak physical educ., music, and art programs	14	3	10
Lack of after-school activities	11	7	10
Unsatisfactory teachers	11	2	8
Undesirable labeling as gifted	11	0	7
Inadequate physical facilities	6	8	7
Development of snobbishness	7	3	6
Miscellaneous (lack of male teachers, neglect of basics, too much testing, etc	5	5	5

* Percentages rounded off to nearest whole number. One Hundred and six public, and fifty-nine parents of catholic pupils responded.

When the disadvantages cited by the parents were classified with reference to the ability levels of the pupils, some important differences were observed. Almost twice as many of the responses of parents of the "talented" (lowest) pupils (47 versus 25 percent) as of the parents of the "superior" students cited inadequate transportation arrangements as a disadvantage, while only 16 percent of the parents of the middle group mentioned this matter. And, again, almost twice as many parents of the children in the "talented" category as in the "superior" class (22 to 13 percent) reported as a disadvantage their feelings that the children felt separated from other children in the new school which they attended. Three and four times as many of the parents of the "very talented" than of parents of the other groups (13, 4 and 4 percent respectively) suggested that labeling of the pupils as gifted was a disadvantage; and, only 13 percent of the total number of parents of pupils in the "superior" group indicated a greater development of snobbishness in their children. Parents of children in the middle group reported isolation from neighborhood friends less frequently as a disadvantage ("superior" 35, "very talented" 21 and "talented" 28 percent) than did the others.

Considering the fact that the parents were encouraged to write freely about the advantages and disadvantages of the program and that the plan gave them an opportunity to air all their grievances about education as well as their satisfactions, it is interesting to observe that there is very little dissatisfaction with the actual classroom situations. Most of the disadvantages cited were concerned with the fact that the pupils had to be transported at some

expense, that transportation did reduce somewhat the time for pupils' play in their own neighborhoods, and that it resulted in some feeling of separation in their new school situations. Less than ten percent of the responses were concerned with such matters as unsatisfactory teaching, excessive work, inadequate programs and facilities, and undesirable labeling of the pupils as gifted. Except in the areas of transportation to a new school, and matters related to it, there appeared to be no important differences among the attitudes of parents of "very talented," "talented" and "superior" pupils in the program.

When parents are invited to suggest improvements in the schools, they are usually eager to express them. The relatively small number of suggested improvements noted in Table 8.3 indicates that the parents of children in the gifted classes tended to be satisfied with the offerings. Improvement of teaching methods were most commonly suggested, with twice as much demand for it among the public school parents. Concern for more recreational and physical education opportunities appears second on the list, and the reduction of homework is next on the list of priorities. Others appear in such small frequencies that they suggest particular concerns of a few parents, perhaps the grinding of personal axes, and perhaps reflections of particular problems that arose during the school years.

TABLE 8.3 IMPROVEMENTS IN PROGRAM SUGGESTED BY PARENTS

	Catholic				Public				All total
	t	vt	s	total	t	vt	s	total	
Teaching methods	0	1	3	4	2	4	2	8	12
Physical education and recreation	1	2	2	5	1	1	1	3	8
Reduction of homework	0	1	1	2	2	1	0	3	5
Creative arts	0	1	1	2	0	2	0	2	4
More individual work needed	0	1	0	1	2	0	0	2	3
More field trips and visits	1	1	0	2	0	1	0	1	3
More pupil interaction	0	0	0	0	1	1	1	3	3
More special help when needed	0	1	1	2	0	0	0	0	2
More parental involvement	0	0	0	0	0	1	1	2	2
More speakers	0	1	0	1	0	1	0	1	2
More emphasis on society	0	1	0	1	1	0	0	1	2
Better marking procedure	0	1	0	1	0	1	0	1	2
Projects too long	0	1	1	2	0	0	0	0	2
Smaller classes	0	1	0	1	1	0	0	1	2
More clubs	1	0	0	1	0	0	0	0	1
More basic material	1	0	0	1	0	0	0	0	1
More career information	0	0	0	0	0	1	0	1	1
Lunch program	0	0	0	0	0	1	0	1	1
Totals	4	13	9	26	10	15	5	30	56

vt = very talented; t = talented; s = superior.

The greatest number of suggestions came from parents of the "very talented" pupils. They made as many suggestions as the parents of the "talented" and "superior" combined. This finding suggests that they were much more aware of the potential and, therefore, of the special needs of their children. Some evidence about their awareness is presented in the following section.

PARENTS' OBSERVATION OF THEIR CHILDREN

The results obtained when parents were asked to volunteer information about their children's special talents and skills are reported in Table 8.4. The responses were not in check-list or other structured form and the parents were free to indicate in their own words the skills and talents they had observed. Analysis of the reports indicated no important differences between those of Catholic and public pupils, therefore, no distinction has been made in the table.

Of the 128 responses (parents could indicate more than one talent for each child) 45 percent were for "very talented," 26 percent for the "talented" and 29 percent for "superior" pupils. The differences suggests that parents do recognize the multi-potentiality of the very talented pupils. The figures also suggest that these children have demonstrated to their parents that they are capable in many areas other than the purely academic. Since the parents were responding, however, to questions asked by administrators of the gifted program, the frequent references to school subject fields might have been anticipated.

TABLE 8.4 PARENTS' RESPONSES TO A QUESTION ABOUT THEIR CHILDRENS' SPECIAL TALENTS AND SKILLS

Special talents and skills indicated	Talented Pupils	Very Talented Pupils	Superior Pupils	Totals
Art or writing	6	8	5	19
In many areas	3	5	3	11
Music	4	3	2	9
Science	1	7	4	12
Mathematics	2	4	3	9
Athletics	1	4	3	8
Sociability	2	3	3	8
Responsibility	2	3	3	8
Verbal areas	1	4	1	6
Open-mindedness	1	4	1	6
Reading	2	0	2	4
Wide knowledge	0	3	1	4
Imaginative	2	2	0	4
Thinks well	0	1	2	3
Dramatics	1	1	1	3
Leadership	0	1	2	3
Memory	2	1	0	3
Domestic skills	0	2	0	2
Sense of humor	1	0	0	1
Independent study	1	0	0	1
Organization	0	0	1	1
Dancing	1	0	0	1
Group work	0	1	0	1
Patience	0	1	0	1
Totals	33	58	37	128

Even greater mention of talents and skills might have occurred if parents had not been constrained by the tendency to avoid boasting. One mother indicated that difficulty when she said that "fond mothers have trouble in being humble about their own children."

Parents have excellent opportunities to observe the behavior of their children in out-of-school situations; consequently, the investigators took advantage of such circumstances to obtain information about the children in other than classroom situations. Several times during the periods of their children's school attendance, parents were asked to respond to the question, "What does your child do when there is nothing that he has to do?" The data in the table below were obtained by asking that question when the students were in the seventh and eighth grades. Analysis of the data indicated no important differences between Catholic and public school pupils and they have been combined to provide a summary picture.

TABLE 8.5 PARENTS' STATEMENTS IN ANSWER TO THE QUESTION,
"WHAT DOES YOUR CHILD DO WHEN THERE IS NOTHING HE HAS TO DO"

Statements	Talented		Very Talented		Superior		Total	%
	N	%	N	%*	N	%		
Reads	14	31	29	27	21	35	64	30
Plays with others	8	18	24	23	12	20	44	20
Sports & Hobbies	9	20	16	15	10	17	35	17
TV & Radio	4	9	15	14	4	7	23	11
Plays by himself	4	9	7	7	6	10	17	8
Music or art work	3	7	9	8	2	3	14	7
Plays with siblings	2	5	3	3	5	8	10	5
Talks on telephone	1	1	3	3	0	0	4	2
Totals	45		106		60		211	

* Percent of parents of children in each category making the statement.

The data indicate much interest in reading which might reflect the emphasis on that activity in their special school program. Little evidence of a tendency to be a "loner," which is often considered to be a characteristic of the gifted pupil, is presented, nor is there any marked tendency to spend excessive time in the more isolated activities of watching TV and listening to the radio. When the group activities of playing with others, engaging in sports, playing with siblings, and talking on the phone are combined they account for some 44 percent of their activities. These group activities, with reading and some work in art and music, seem to account for most of the leisure time activities. The extra time spent on reading and the arts seems to be the factor that parents see as differentiating the gifted from the average elementary school child.

It was noted in the paragraphs above that the parents reported their children participated in many group activities. When the parents were asked about their children's choice of friends in such activities, the data in Table 8.6 were obtained. They indicate overwhelming parental (approximately 90 percent) approval of the choice of friends.

TABLE 8.6 PARENTS' STATEMENTS ABOUT THEIR CHILDREN'S CHOICE OF FRIENDS"

Statements	Talented N	Very Talented N	Superior N	Total N
Approval of friends	13	35	23	71
Has too few friends	3	2	2	7
No close friends	0	1	0	1
Totals	16	38	25	79

Only one parent indicated that his child had no close friends, and less than ten percent thought that the friends were too few in number. It appears, therefore, that parents did not see any significant indication that participation in the program resulted in either the loss of friends or the undesirable selection of friends.

PARENTS' REPORTS ON PUPILS' OPINIONS

The data presented in previous sections of this chapter indicated that parents generally had responded very favorably toward the gifted program. Perhaps the response was resulted from (and casual discussions with parents suggested it to be so) the favorable reactions of their children to their participation. When 92 parents responded in a questionnaire to the inquiry about how their children reacted toward the gifted program, the results presented in Table 8.7 were obtained.

TABLE 8.7 **PARENTS' APPRAISAL OF THEIR GIFTED CHILDREN'S**
ATTITUDES TOWARD THEIR CLASSES

Attitudes	Talented		Very Talented		Superior		N	Total	%
	N	%	N	%	N	%			
Very Positive (Very eager; loves it, like it very much, very positive; enthusiastic)	13	52	26	72	7	23	46		50
Positive; (enjoys it; thinks it is good; likes it; etc.)	6	24	4	11	11	35	21		23
Positive with some qualifications (Good, but too much homework; likes all but one subject; likes all but one teacher, etc.)	2	8	4	11	5	16	11		12
Variable (it fluctuates; is improving; depends on the days activities, etc.)	2	8	2	6	5	16	9		10
Negative (doesn't like it, wants out of it, etc.)	2	8	0	0	3	10	5		5
Totals	25		36		31		92		

When all the positive responses are combined, it will be seen that 85 percent of the parents are represented, and that only five percent indicated negative responses. A breakdown by parents of 47 Catholic and 45 public school children revealed that 96 percent and 75 percent of the responses respectively were in the generally positive areas. Only 4 percent of Catholic school parents were in the variable category and none were negative, whereas 14 and 11 percent of the public school parents responses fell in those classifications. The differences may reflect the effectiveness of the programs in the two settings, but they may also indicate the appreciation of Catholic school parents for the opportunity of having their children attend classes with smaller enrollments.

Further study of the table reveals that, in general, more positive responses were made by parents of the "very talented" pupils. No parents of "very talented" children reported negative attitudes on the part of their children, and only 4 of 26 indicated that the attitudes varied from time to time. It does appear, however, that while the pupils' attitudes toward their classes as reported by their parents were generally positive, there is an indication that the parents of brighter students reported the more favorable pupil attitudes.

CONTINUATION OF THE PROGRAM

Perhaps the most crucial indicators of attitudes of parents toward the program were found in their responses to a question about the desirability of keeping it in operation. (Appendix E, Table VIII.1) One hundred and ten of 165 parents responded to the question. Of those responses 102, or approximately 93 percent responded in the affirmative. Although 55 parents did not answer the specific question about continuing the program, enough of them had indicated in their listing of advantages and disadvantages that they did look favorably enough on the program to warrant its continuance. There was no reason to believe that failure to answer the specific question on continuance was an indication of rejection of the program. Actually only five percent of the negative responses were worded strongly enough to suggest that the parents would not send their children to the gifted classes if they were to be continued. The parents who responded negatively indicated that the matters of expense and transportation inconveniences were more significant in determining their attitudes than the nature of the program offered.

SUMMARY

Parental satisfaction with a school program is not an infallible indicator that it is effective, but it may be the ultimate determiner of whether the program will be continued and whether children will be permitted to participate in it. Because of this dependence and because reports of parental observations could offer important indicators of the behavior of pupils of the gifted classes in out-of-school situations, frequent samplings of parental opinions and observations were obtained. The results of analysis of these samplings have been reported in this chapter.

It appears clear that a vast majority of the parents looked upon the program favorably, that they supported continuation of it, and that their children's reactions to it were markedly positive. Favorable comments were center-

ed largely about the enrichment and stimulation aspects of the program while most of the relatively few negative statements centered around the inconvenience of travel and, for the Catholic parents, additional expense. The parents indicated that they had observed considerable development of talents and skills in their children and that these were not developed at the expense of participation in activities with their peers.

Some of the evidence suggested that Catholic school parents looked more positively on the program than did parents of the public school pupils,* and that the parents of "very talented" students in all the schools reported observation of more favorable reactions than the parents of the "talented" and "superior" pupils.

The general findings suggest that when parents have the opportunity to send their gifted children to special classes, most of them look favorably upon the experience provided and favor the continued provision of them in public and Catholic schools.

* Foundation financial support of the program was discontinued during the school year 1968-69. Faced with the task of raising sufficient funds the Catholic school program was unable to start a new program in that year. Parental pressure to continue the program assures that it will be offered in following years. The public schools have continued their program.

CHAPTER IX

TEACHERS' OPINIONS

The selection of teachers in the program, the conditions under which they worked, the nature of the pupils they taught, and the results they produced have all been described in previous chapters. We may now consider teacher opinions about their pupils and the program as they were expressed informally and in response to special instruments designed to obtain these opinions. Before such opinions are considered, however, it seems desirable to examine the outcomes of a supplementary study designed to determine whether the commonly expressed idea that the elimination of gifted students from regular classes does adversely affect the work of the teachers in those classes.

REPORTS OF NON-PROGRAM TEACHERS

In obtaining opinions about a controversial matter, one may ask the subjects to respond directly to questions about it, or one may give them an opportunity to discuss matters which they consider important and note the extent to which they raise the controversial issues without specific prompting. If the direct method is used, the subjects may be induced to give opinions on matters which are not of paramount concern to them or on matters to which they have not given consideration. On the other hand, if any procedure such as the removal of gifted pupils from their classes has influenced their teaching situations, it is likely to be voiced if it has actually been a problem to them. Because of the emphasis desired, the indirect method was employed in the following study.

Twenty teachers from whose classes the students in the gifted program were drawn were interviewed by a member of the Bradley University faculty. After introducing himself, he indicated his purpose in the following statement:

I want you to comment on the choice of any factors which have operated during the past five years to increase the effectiveness of teaching or learning situations in your classes, and then later I will ask you about some of the factors which have operated to reduce the teaching or learning effectiveness in your classroom. Go ahead and talk and I may ask a question here and there. Let us know what you think.

The teachers used the opportunity to express their dissatisfaction with such matters as physical facilities, class size, availability of materials, supplies and references, rigidity of textbook policies, lack of parental interest, and even their own personal shortcomings. However, only one of the twenty interviewed volunteered the opinion that the removal of gifted children for the special program had reduced the efficiency of teaching and learning in her classroom. She said, "We've lost our best ones, of course, to the gifted program . . . but there are still some in the group who are excellent students . . . I appreciate the gifted program getting their talent, but I wish we could keep some in our classes."

In all cases where the teachers had not volunteered opinions about the placing of gifted pupils in special classes, the interviewer raised the issue by asking about the presence or absence of gifted children in their own classrooms. Nine of the teachers reported that they still had many bright pupils in their classes. One of the nine suggested that the leaders which remained in the classes were not as effective as the gifted who had been removed.

This sample of teachers indicated clearly that the removal of the gifted children had not impaired the teaching and learning situation in their classrooms to the extent that they considered it to be a serious impediment. In 19 of the 20 interviews it was not even mentioned until prompting was employed. The common argument that placing of gifted children in special classes reduces the effectiveness of regular classes seems not to be justified when teacher opinion is employed as the criterion. Three samples from interviews may be found in Appendix F.

SAMPLE OPINIONS OF TEACHERS IN THE GIFTED PROGRAM

In August and September of 1967, ten teachers of the classes for the gifted were interviewed by the member of the Bradley University faculty who had held the previously described interviews with non-program teachers. During the tape recorded sessions he attempted to obtain their opinions about the assets and limitations of the program. As indicated in the typescript which appears later in this section the interviewer encouraged each teacher to talk freely, to respond in the words of her own choosing, and to continue at the length she found necessary.

Since the data were not obtained by forcing responses to preconceived categories and since the teachers did not always confine their discussions to consideration of assets and limitations, it was necessary to read each of the typescripts in their entirety. The following classifications are based on the reading of the typescripts. Since the teachers brought up several items within the general classification, the frequencies exceed the number of individual teachers interviewed.

<u>Assets of the Gifted Program</u>	<u>Frequency of mention</u>
1. Brought together pupils of similar learning abilities, maturity, so that there was opportunity for individual growth, creativity, special projects, and provision of a challenging environment.	25
2. Permitted development of special skills in research, independent study, and library work.	7
3. Permitted curriculum improvement and use of supplementary materials.	17
4. Provided opportunity for adding foreign languages and economics to the curriculum.	
5. Reduced disciplinary and boredom problems and challenged the pupils	4
6. Brought special assistance to teachers in form of meetings, consultant help and stenographic assistance.	9
7. More parent participation and enthusiasm	2
8. Extra pay for teachers	1
9. Miscellaneous — including smaller classes, children's sense of humor, class morale, and better student performance.	8

The disadvantages cited by the teachers are listed in the categories below. As above, the classifications are combinations of the reports in the typescripts. Since a teacher could mention several assets and limitations which fell within a particular category, the frequencies are sometimes greater than the number of teachers interviewed.

<u>Limitations of the Gifted Program</u>	<u>Frequency of mention by teachers</u>
1. Classes should have been centrally located to permit coordination of teachers and materials	11
2. Standards for selection were not high enough	9
3. Inadequate coordinator, consultant, and principal assistance for in-service work and curriculum improvement	11
4. Inadequate facilities: library, playground, lunchrooms	11
5. Not enough specialists, such as counselors and psychologists	2
6. Financial limitations, such as tuition (Catholic schools), inadequate teachers salaries	3
7. Curricular revisions needed, but not made; limitations imposed by requirement of regular curricular coverage	9
8. Undesirable influences on pupils (transportation out of home neighborhood, lack of contact with students from regular classes, too much pressure on pupils).	13
9. Parents use program as prestige symbol	4
10. Uncertainty about continuation of the program	5
11. "Smart Alec" behavior of some pupils	2
12. Miscellaneous including one mention each of too much parental criticism of teachers, too many tests, lack of a coordinator for one year, inadequate public relations	4

SUMMARY

When children are taken from regular classes to attend special classes, attitudes about the practice held both by those teachers from whose classes they were removed and those teachers to whom they were assigned become important influences in determining the success of the program. Samplings of opinions of teachers in both categories were obtained in interviews conducted by a member of the Bradley University faculty.

Analyses of interviews from non-program teachers indicated that removing pupils from regular classes to participate in the gifted program was not considered to be a serious impediment to effective teaching. Individual sessions with teachers in the gifted program revealed that they looked very favorably upon the program. They commented particularly on the benefits derived from grouping the children to provide a challenging environment. They listed a few limitations of the program, among which the most common were the distribution of the classes in several

schools rather than in a central location, as well as inadequacy of some facilities, and insufficient coordination, consultation, and in-service assistance.

The manner in which the interviews were conducted, and the responses obtained warrant the conclusions that, first, regular classroom teachers do not report significant reduction of effectiveness when gifted pupils are removed from their classes and, secondly, that gifted class teachers look favorably on the program.

CHAPTER X

SUMMARY, CONCLUSIONS AND IMPLICATIONS

The foregoing chapters have dealt at length, both with the purposes, procedures, and populations of the study, and with the specific results obtained in several areas of pupil development, parental opinions, and teachers' attitudes. Selection of program and comparison pupils was described, and the procedures employed in working with them outlined. Four case studies were presented to illustrate the kinds of pupils involved and statistical analyses were offered as evidence of pupils' development and performances. The following abbreviated summary of the program situation is followed by a summary of the results.

1. Three hundred and thirty-six pupils, selected when they were third graders in Peoria public schools by means of test scores and teacher reports, attended special classes for the gifted in Peoria public schools during the years they were in the fourth through eighth grades. One hundred and fifty-one pupils in the Peoria area Catholic schools, selected in a similar manner, were placed in classes for the gifted during the same period.
2. Each pupil in the special classes was matched with a pupil in the Rockford schools in terms of test scores and socio-economic status. These comparison pupils remained in their regular classes during the period of their attendance of grades four to eight. The matching of individuals was done to secure similarity of groups. After the matching of individuals was done, no further comparisons of individuals were made. It was assumed, and some observation in school situations justified the assumption, that the gifted children who were in regular classes in the comparison schools did not have the special program of the program classes described in Chapter III.
3. The teachers of the special classes for the gifted were selected by the school administrators from each of the school systems. Their teaching experience averaged nine years, and eight held advanced degrees. Sixteen attended special summer programs on the gifted to prepare them for their duties and were given in-service assistance by a coordinator and by specialists. They were also provided with secretarial help and any special materials they sought.
4. Programs for the gifted were designed to assist pupils to gain more knowledge sooner and in greater depth than could be gained from the usual program; broaden their knowledge and understanding by introducing new areas of study (particularly foreign language and economics) as part of their regular curriculum; increase their social awareness and concern; develop leadership skills; strengthen their self-esteem by developing realistic evaluation of themselves; promote critical and creative habits of attacking problems; stimulate their curiosity; broaden their interests; and develop habits of self-motivation to learn.
5. A research committee, composed of persons not connected with the administration, instruction, or operation of the program, maintained cumulative records of the development of the comparison and program pupils with respect to the objectives listed in the paragraph above. Research assistants administered the instruments employed and collated the data on each pupil. From the processed information it was possible to offer evidence of pupils' test performance, reading records, samples of achievement in the usual academic areas, samples of their writing, activities outside of school, projects completed, measures of self-appraisal, performance on special tasks, anecdotal records and ratings by teachers, and reports of trained classroom observers.
6. Reports of parent and teacher opinions were obtained by means of annual questionnaires and interviews held at suitable times during the course of the program.
7. Parents were responsible for the transportation of the gifted pupils to the special classes when they were located outside of their own school neighborhood. In the Catholic schools, there was an additional charge of \$250 a year for tuition.
8. Parents of the program and comparison pupils were informed of their children's development through mailed reports and through meetings with the teachers.

LIMITATIONS OF THE STUDY

Readers who are aware of the difficulties encountered in the study of the development of unique and complex individuals in a free society and who know about the functioning of schools must recognize that limiting factors to the execution of a perfect experiment must always appear. Some limitations which must be considered in the interpretation of the summary of the results reported later in this chapter are reported below.

1. Selection of teachers was done by the school administration and was not controlled by the policy committee of the study. Regardless of the sincerity of the selectors the process resulted occasionally in assignment of inferior or inexperienced teachers to the program. The policy committee recognized the difficulty of forcing school principals to give up their master teachers, but it is clear that the teaching quality obtained was a very limiting factor.
2. Although serious attempts were made to get comparison pupils who were similar in performances and background, it is recognized that the pupils were not identical, and that factors other than school-related activities may have influenced their development throughout the period of elementary school attendance. This limitation is inherent in all studies of this kind and it is always difficult to determine whether differences between program and comparison group subjects are related to an experimental treatment rather than to extension of patterns of individual development that may have preceded, continued through, and persisted after an experiment.
3. During most of the period of the study the gifted classes were held in schools in various geographic areas. This resulted in some isolation of teachers from others in the program and in some lack of communication among them about purposes and procedures. It also resulted in some isolation of pupils from those in regular classes, some reduction of neighborhood activities, and some problems for parents in arranging transportation.
4. During the second year of the study the lack of a coordinator resulted in elimination of in-service education for the teachers and some uncertainty about curricular direction and classroom activities during that year.
5. Instruments for the appraisal of very superior intellectual performances of gifted pupils are not available at this time; hence, accomplishments other than those measured by standardized tests of the multiple choice type could not be appraised in a completely satisfactory manner.
6. Although the need to cover the regular curricular materials of the respective grade levels was recognized and provided for, the inability or reluctance of most teachers and administrators to envision and execute a more imaginative and enriching program was a limiting factor.

SUMMARY OF RESULTS

With full consideration of the design, data, and limitations of the study the reader may now turn to the following summary statement of the findings.

1. The program children equalled or surpassed the comparison pupils in academic achievement as measured by standardized tests despite the fact that their supplementary enriching activities reduced by approximately one-half the time spent on regular classroom activities.
2. Pupils in the gifted program mastered a foreign language at least at the first year high school level. (Approximately one-half of the current ninth graders were placed in third year modern language classes when they entered high school).
3. Analyses of projects of the program pupils indicate that they developed considerable skill in research.
4. Performances on special assignments show that the program pupils developed important habits of critical thinking.

5. The data indicate that the program pupils demonstrated significant growth in social awareness, social concern, and in leadership.
6. Examination of the children's writings indicated that they had made substantial progress in the development of creativity.
7. Reports by parents and teachers reveal that significant expansion of the interest of program pupils interests.
8. Teachers' reports indicated that the pupils in the gifted classes became more self-reliant in carrying out activities which they were assigned and which they initiated.
9. Teachers of the gifted classes looked favorably upon the program. Regular classroom teachers reported no significant reduction of effectiveness when the gifted pupils were removed from their classes.
10. Parents of pupils in the gifted program reported a high degree of satisfaction with it, and more than ninety percent indicated that it should be continued. Their dissatisfactions were related more to such practical matters as transportation and expense rather than to classroom activities.

IMPLICATIONS

In order to preserve our American ideas of providing good educational opportunities for all children and, at the same time to do justice to all the latent talents of the gifted, some modifications of current school practices seem essential. The results of this study suggest that one of the effective modifications for the gifted is the organization of special classes for them. It appears that all schools should give serious consideration to organization of such classes as one of the procedures that might be adopted in an attempt to offer the kind of education that really provides for individual differences among the large and varied populations they serve.

APPENDIX - A

**TABLE II.1 SIGNIFICANCE OF DIFFERENCE BETWEEN PUBLIC PROGRAM AND COMPARISON
GROUPS ON STEP TESTS – “SUPERIOR” CLASSIFICATION
CLASS OF 1964-65 (N=15)**

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
Tests (Form 3A)						
Mathematics	255	12.5	257	9.8	-1.198	n.s.
Science	264	7.3	263	10.1	.353	n.s.
Writing	258	12.8	261	14.0	- .672	n.s.
Reading	271	13.0	268	13.4	.649	n.s.
Social Studies	258	6.0	252	8.4	2.561	.01-.05

“Superior” classification is an I.Q. of 140 and above.

**TABLE II.2 SIGNIFICANCE OF DIFFERENCE BETWEEN CATHOLIC PROGRAM AND COMPARISON
GROUPS ON STEP TESTS – “SUPERIOR” CLASSIFICATION
CLASS OF 1964-65 (N=9)**

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
Tests (Form 3A)						
Mathematics	257	9.8	253	5.0	1.117	n.s.
Science	261	10.8	258	6.7	.998	n.s.
Writing	262	10.9	255	9.3	1.668	.05-.10
Reading	273	12.0	265	10.4	1.707	.05-.10
Social Studies	257	13.4	252	8.6	1.018	n.s.

“Superior” classification is an I.Q. of 140 and above.

**TABLE II.3 SIGNIFICANCE OF DIFFERENCES BETWEEN PUBLIC PROGRAM AND COMPARISON
GROUPS ON STEP TESTS – “VERY TALENTED” CLASSIFICATION
CLASS OF 1964-65 (N=17)**

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 3A)						
Mathematics	256	6.4	257	7.2	-.471	n.s.
Science	263	5.8	260	4.8	1.137	n.s.
Writing	261	9.9	260	9.5	.234	n.s.
Reading	269	9.8	264	9.7	1.677	.05-.10
Social Studies	257	6.7	253	4.7	1.681	.05-.10

“Very Talented” Classification is an I.Q. of 130 - 139.

**TABLE II.4 SIGNIFICANCE OF DIFFERENCES BETWEEN CATHOLIC PROGRAM AND COMPARISON
GROUPS ON STEP TESTS – “VERY TALENTED” CLASSIFICATION
CLASS OF 1964-65 (N=23)**

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 3A)						
Mathematics	254	11.1	252	8.2	1.842	.05
Science	261	7.7	257	7.6	2.160	.05
Writing	259	11.4	259	11.6	0.319	n.s.
Reading	265	10.2	262	10.9	1.612	.05 - .10
Social Studies	254	5.5	253	5.6	2.252	.01 - .05

“Very Talented” classification is an I.Q. of 130 - 139.

TABLE II.5 SIGNIFICANCE OF DIFFERENCE BETWEEN PUBLIC PROGRAM AND COMPARISON
GROUPS ON STEP TESTS – “TALENTED” CLASSIFICATION
CLASS OF 1964 - 65 (N=7)

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 3A)						
Mathematics	252	7.5	253	12.0	-.320	n.s.
Science	257	8.5	259	8.9	-.388	n.s.
Writing	255	10.2	258	8.9	-.398	n.s.
Reading	264	10.7	264	7.0	-.049	n.s.
Social Studies	249	1.6	251	4.4	-1.341	n.s.

“Talented” classification is an I.Q. of 120 - 129.

TABLE II.6 SIGNIFICANCE OF DIFFERENCES BETWEEN CATHOLIC PROGRAM AND COMPARISON
GROUPS ON STEP TESTS – “TALENTED” CLASSIFICATION
CLASS OF 1964 - 65 (N=1)

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 3A)						
Mathematics	259	0	250	0	0	0
Science	264	0	258	0	0	0
Writing	263	0	244	0	0	0
Reading	265	0	260	0	0	0
Social Studies	258	0	250	0	0	0

“Talented” classification is an I.Q. of 120 - 129. Since this pupil had a WISC I.Q. score of 137, the STEP test results were used in the “Very Talented” classification.

TABLE II.7 SIGNIFICANCE OF DIFFERENCE BETWEEN PUBLIC PROGRAM AND COMPARISON
GROUPS ON STEP TESTS – “SUPERIOR” CLASSIFICATION
CLASS OF 1965 - 66 (N=14)

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 3A)						
Mathematics	258	6.5	256	6.4	1.244	n.s.
Science	260	10.1	262	7.6	-1.031	n.s.
Writing	257	14.6	255	11.3	.494	n.s.
Reading	268	12.1	265	12.0	2.077	.01 - .05
Social Studies	257	6.5	254	7.1	1.242	n.s.

“Superior” classification is an I.Q. of 140 and above.

TABLE II.8 SIGNIFICANCE OF DIFFERENCE BETWEEN CATHOLIC PROGRAM AND COMPARISON
GROUPS ON STEP TESTS – “SUPERIOR” CLASSIFICATION
CLASS OF 1965 - 66 (N=7)

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 3A)						
Mathematics	253	8.0	251	8.3	1.216	n.s.
Science	262	4.3	263	5.6	-.284	n.s.
Writing	259	14.1	263	10.2	-.833	n.s.
Reading	272	11.1	267	11.3	1.770	.05 - .10 - .05
Social Studies	257	8.2	253	6.7	.828	n.s.

“Superior” classification is an I.Q. of 140 and above.

TABLE II.9 SIGNIFICANCE OF DIFFERENCE BETWEEN PUBLIC PROGRAM AND COMPARISON
GROUPS ON STEP TESTS – CLASSIFIED AS “VERY TALENTED”
CLASS OF 1965 - 66 (N=16)

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 3 A)						
Mathematics	251	9.9	252	10.8	-.236	n.s.
Science	260	8.4	258	8.5	.784	n.s.
Writing	262	16.5	257	14.2	1.006	n.s.
Reading	263	14.6	262	13.2	.364	n.s.
Social Studies	251	7.9	256	7.5	-2.029	.05 - .10

“Very Talented” classification is an I.Q. of 130 - 139.

TABLE II.10 SIGNIFICANCE OF DIFFERENCE BETWEEN CATHOLIC PROGRAM AND COMPARISON
GROUPS ON STEP TESTS – “VERY TALENTED”
CLASSIFICATION – CLASS OF 1965 - 66 (N=20)

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 3A)						
Mathematics	251	7.7	251	5.4	.124	n.s.
Science	263	4.7	256	6.9	3.649	.01
Writing	261	6.7	260	10.6	.589	n.s.
Reading	270	11.3	260	10.2	4.036	.001
Social Studies	252	6.5	251	10.4	.514	n.s.

“Very Talented” classification is an I.Q. of 130 - 139.

TABLE II.11 SIGNIFICANCE OF DIFFERENCE BETWEEN PUBLIC PROGRAM AND COMPARISON
 GROUPS ON STEP TESTS – “TALENTED” CLASSIFICATION
 CLASS OF 1965 - 66 (N=17)

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 3A)						
Mathematics	250	7.2	251	9.2	-.765	n.s.
Science	253	10.2	258	10.1	-1.573	.05 - .10
Writing	258	13.2	257	12.0	.211	n.s.
Reading	261	13.4	259	12.4	1.457	.05 - .10
Social Studies	251	8.8	254	7.1	-1.280	n.s.

“Talented” classification is an I.Q. of 120 - 129.

TABLE II.12 SIGNIFICANCE OF DIFFERENCE BETWEEN CATHOLIC PROGRAM AND COMPARISON
 GROUPS ON STEP TESTS – “TALENTED” CLASSIFICATION
 CLASS OF 1965 - 66 (N=5)

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 3A)						
Mathematics	258	5.9	255	8.6	.682	n.s.
Science	265	2.5	251	10.1	3.602	.05
Writing	253	11.6	268	6.9	-2.006	.05 - .10
Reading	267	12.1	262	5.9	.898	n.s.
Social Studies	260	5.1	249	4.8	3.586	.05

“Talented” classification is an I.Q. of 120 - 129.

TABLE II.13 HEALTH PROBLEMS OF PUPILS
Class of 1964 - 65

Item	Percent of responses			
	Program	Public Comparison	Program	Catholic Comparison
1	2	3	4	5
Health problems				
Nothing	72%	82%	75%	80%
Eye trouble.	0	2	6	0
Allergies.	10	3	0	0
Poor appearance	0	0	13	0
Permanent disease, injury	5	3	0	10
Temporary ailment	13	10	6	10
Other.c.	0	0	0	0
Total	100%	100%	100%	100%

TABLE II.14 HEALTH PROBLEMS OF PUPILS
Class of 1965 - 66

Item	Percent of responses			
	Program	Public Comparison	Program	Catholic Comparison
1	2	3	4	5
Health problems				
Nothing	75%	81%	81%	78%
Eye trouble	13	6	3	6
Allergies.	00	9	0	3
Poor appearance	4	0	0	0
Permanent disease, injury	4	0	3	0
Temporary ailment	4	4	10	13
Other	0	0	3	0
Total	100%	100%	100%	100%

TABLE II.15

FAVORITE RECREATIONS OF PUPILS

Class of 1964-65

Item	<u>Percent of responses</u>			
	<u>Public</u>		<u>Catholic</u>	
	Program	Comparison	Program	Comparison
1	2	3	4	5
Recreations				
Don't know	3%	3%	0%	0%
Reading	2	8	3	3
Active play - group	64	54	47	58
Active play - indiv.	26	28	38	23
TV, records	0	3	0	6
Hobbies	5	2	6	10
Very little, nothing	0	0	0	0
Other	0	2	6	0
Total	100%	100%	100%	100%

TABLE II.16

FAVORITE RECREATIONS OF PUPILS

Class of 1965-66

Item	<u>Percent of responses</u>			
	<u>Public</u>		<u>Catholic</u>	
	Program	Comparison	Program	Comparison
1	2	3	4	5
Recreations				
Don't know	4%	0%	0%	0%
Reading	6	0	3	3
Active play - group	43	45	31	41
Active play - indiv.	26	42	47	47
TV, records	6	2	3	0
Hobbies	11	9	10	9
Very little, nothing	0	0	0	0
Other	4	2	6	0
Total	100%	100%	100%	100%

TABLE II.17

FAVORITE T.V. PROGRAMS OF PUPILS
Class of 1964-65

Item	Program	<u>Percent of responses</u>		Program	Comparison
		<u>Public</u>		<u>Catholic</u>	
1	2	3	4	5	
Favorite T.V. Programs					
None	26%	10%	9%	6%	
Comedy, variety	31	18	16	26	
Cartoons	10	7	19	23	
Science fiction	2	13	6	3	
Adventure	15	21	31	19	
Movies, serials	13	21	10	7	
Mysteries	0	0	0	0	
Sports	0	0	3	3	
Educational-scientific . . .	3	2	0	3	
Educational-animal	0	8	3	10	
Total	100%	100%	100%	100%	

TABLE II.18

FAVORITE T.V. PROGRAMS OF PUPILS
Class of 1965-66

Item	Program	<u>Percent of responses</u>		Program	Comparison
		<u>Public</u>		<u>Catholic</u>	
1	2	3	4	5	
Favorite T.V. programs					
None	8%	11%	6%	3%	
Comedy, variety	30	34	25	38	
Cartoons	2	6	6	3	
Science fiction	11	11	13	16	
Adventure	43	26	41	34	
Movies, serials	6	6	3	0	
Mysteries	0	2	0	0	
Sports	0	0	6	6	
Educational-political . . .	0	2	0	0	
Educational-scientific . . .	0	2	0	0	
Educational-animal	0	0	0	0	
Total	100%	100%	100%	100%	

TABLE II.19

PARTS OF NEWSPAPERS READ BY PUPILS
Class of 1964-65

Item	<u>Percent of responses</u>			
	<u>Public</u>		<u>Catholic</u>	
	Program	Comparison	Program	Comparison
1	2	3	4	5
Newspaper sections				
None	5%	2%	3%	3%
Comics, children's spec. . . .	51	36	44	29
Sports	13	31	22	32
Front page, headlines . . .	26	15	13	16
Sensational stories	2	0	6	3
Ads, puzzles, births	3	5	3	7
Weather	0	3	6	0
Editorials	0	3	3	0
Women's page	0	5	0	10
All other	0	0	0	0
Total	100%	100%	100%	100%

TABLE II.20

PARTS OF NEWSPAPERS READ BY PUPILS
Class of 1965-66

Item	<u>Percent of responses</u>			
	<u>Public</u>		<u>Catholic</u>	
	Program	Comparison	Program	Comparison
1	2	3	4	5
Newspaper sections				
None	0%	4%	0%	3%
Comics, children's spec. . .	47	40	66	38
Sports	19	7	22	19
Front page, headlines . . .	26	32	6	25
Sensational stories	2	4	0	0
Ads, puzzles, births	2	7	6	9
Weather	0	2	0	0
Editorials	2	0	0	3
Women's page	0	4	0	3
All/other	2	0	0	0
Total	100%	100%	100%	100%

TABLE IL21

FAVORITE MAGAZINES OF PUPILS
Class of 1964-65

Item	<u>Percent of responses</u>			
	<u>Public</u>		<u>Catholic</u>	
	Program	Comparison	Program	Comparison
1	2	3	4	5
Favorite magazines				
None	5%	16%	13%	7%
Children's	28	15	22	42
Comic books	10	0	22	10
Adult general interest . . .	33	46	31	32
Women's	13	18	3	0
Men's	8	5	9	6
Catalogs	3	0	0	0
Other, teen	0	0	0	3
Total	100%	100%	100%	100%

TABLE IL22

FAVORITE MAGAZINES OF PUPILS
Class of 1965-66

Item	<u>Percent of responses</u>			
	<u>Public</u>		<u>Catholic</u>	
	Program	Comparison	Program	Comparison
1	2	3	4	5
Favorite magazines				
None	15%	6%	6%	6%
Children's	36	27	44	25
Comic books	2	6	9	6
Adult general interest . . .	40	38	19	38
Women's	5	8	13	9
Men's	2	11	6	13
Catalogs	0	0	0	0
Other, teen	0	4	3	3
Total	100%	100%	100%	100%

TABLE II.23

BOOKS READ BY PUPILS
Class of 1964-65

Item	<u>Percent of responses</u>				
	Program	<u>Public</u>	Comparison	<u>Catholic</u>	Comparison
1	2	3	4	5	
Best books read					
None, don't know	2%	0%	3%	0%	
Hero, folk, mythology . . .	0	10	0	6	
Animal	3	5	3	13	
Family, school, career . . .	5	13	3	0	
Biography, autobiography .	10	18	16	13	
Other times, places	18	13	19	13	
World today	0	0	0	3	
Adventure	15	5	12	3	
Mystery	18	13	16	16	
Fun and nonsense	13	5	0	10	
Sports, hobbies	3	5	9	7	
Science, sci-fiction	13	10	19	16	
Poetry and plays	0	3	0	0	
Total	100%	100%	100%	100%	

TABLE II.24

BOOKS READ BY PUPILS
Class of 1965-66

Item	<u>Percent of responses</u>			
	Program	<u>Public</u>	Program	<u>Catholic</u>
		Comparison		Comparison
1	2	3	4	5
Best books read				
None, don't know	2%	0%	0%	3%
Hero, folk, mythology . . .	4	11	9	6
Animal	13	11	19	3
Family, school, career . . .	9	13	19	3
Biography, autobiography .	17	10	6	16
Other times, places	4	4	10	19
World today	0	0	0	0
Adventure	19	22	0	16
Mystery	13	14	25	28
Fun and nonsense	2	2	6	0
Sports, hobbies	6	2	0	3
Science, sci-fiction	9	11	6	3
Poetry and plays	2	0	0	0
Total	100%	100%	100%	100%

TABLE II.25

OUTSIDE SCHOOL ACTIVITIES BY PUPILS
Class of 1964-65

Item	<u>Percent of responses</u>			
	Program	<u>Public</u>	Program	<u>Catholic</u>
		Comparison		Comparison
1	2	3	4	5
Outside school activities				
None	18%	13%	41%	16%
Active sports - group . .	2	8	6	16
Active sports - indiv. . .	8	3	6	0
Clubs, organizations . . .	36	56	28	55
Music, dancing lessons . .	36	20	19	13
Other	0	0	0	0
Total	100%	100%	100%	100%

TABLE II.26

OUTSIDE SCHOOL ACTIVITIES BY PUPILS
Class of 1965-66

Item	<u>Percent of responses</u>			
	Program	<u>Public</u>	Program	<u>Catholic</u>
		Comparison		Comparison
1	2	3	4	5
Outside school activities				
None	15%	9%	25%	9%
Active sports - group . . .	6	6	3	25
Active sports - indiv. . .	4	13	13	6
Clubs, organizations . . .	45	30	44	38
Music, dancing lessons . .	24	36	12	19
Other	6	6	3	3
Total	100%	100%	100%	100%

TABLE II.27

PUPILS' ACTIVITIES IN SPORTS
Class of 1964-65

Item	<u>Percent of responses</u>			
	<u>Public</u>		<u>Catholic</u>	
	Program	Comparison	Program	Comparison
1	2	3	4	5
Sports				
None	0%	0%	3%	0%
Active (group)	49	64	38	68
Active (indiv.)	51	36	59	32
Total	100%	100%	100%	100%

TABLE II.28

PUPILS' ACTIVITIES IN SPORTS
Class of 1965-66

Item	<u>Percent of responses</u>			
	<u>Public</u>		<u>Catholic</u>	
	Program	Comparison	Program	Comparison
1	2	3	4	5
Sports				
None	4%	2%	0%	9%
Active (group)	75	51	78	63
Active (indiv.)	21	47	22	28
Total	100%	100%	100%	100%

TABLE II.29

HOBBIES OF PUPILS
Class of 1964-65

Item	<u>Percent of responses</u>			
	<u>Public</u>		<u>Catholic</u>	
	Program	Comparison	Program	Comparison
1	2	3	4	5
Hobbies				
None, don't know	10%	0%	9%	6%
Collections	41	41	34	29
Reading	5	13	13	10
Art work, crafts	28	33	38	39
Caring for pet	5	0	0	0
Sports	8	5	3	13
Other	3	8	3	3
Total	100%	100%	100%	100%

TABLE II.30

HOBBIES OF PUPILS
Class of 1965-66

Item	<u>Percent of responses</u>			
	<u>Public</u>		<u>Catholic</u>	
	Program	Comparison	Program	Comparison
1	2	3	4	5
Hobbies				
None, don't know	9%	4%	10%	6%
Collections	47	57	47	47
Reading	4	9	6	3
Art work, crafts	34	26	31	38
Caring for pet	0	0	0	0
Sports	4	0	6	6
Other	2	4	0	0
Total	100%	100%	100%	100%

TABLE II.31

EDUCATIONAL AMBITIONS OF PUPILS
Class of 1964-65

Item	<u>Percent of responses</u>			
	<u>Public</u>		<u>Catholic</u>	
	Program	Comparison	Program	Comparison
1	2	3	4	5
Educational ambitions				
Post college	5%	33%	13%	26%
College	90	62	81	74
High school, vocational. .	5	5	6	0
Undecided	0	0	0	0
Total	100%	100%	100%	100%

TABLE II.32

EDUCATIONAL AMBITIONS OF PUPILS
Class of 1965-66

Item	<u>Percent of responses</u>			
	<u>Public</u>		<u>Catholic</u>	
	Program	Comparison	Program	Comparison
1	2	3	4	5
Educational ambitions				
Post college	36%	0%	28%	13%
College	64	89	63	72
High school, vocational. .	0	4	9	9
Undecided	0	7	0	6
Total	100%	100%	100%	100%

TABLE II.33 VOCATIONAL AMBITIONS FROM PUPIL INTERVIEWS
Class of 1965-66

Item	<u>Percent of responses</u>			
	Program	<u>Public</u>	Program	<u>Catholic</u>
		Comparison		Comparison
1	2	3	4	5
Vocations				
None, undecided	4%	24%	6%	22%
Profession	62	49	44	31
Business	9	4	9	6
Religious	0	2	13	28
Military	4	0	0	0
Housewife	2	0	0	0
Athlete	4	6	9	3
Financial success	0	0	0	0
Be educated	0	0	0	0
Science, space	15	15	19	10
Other	0	0	0	0
Total	100%	100%	100%	100%

TABLE II.34

CLOSEST FRIENDS' DESCRIPTION OF PUPIL

Class of 1965-66

Item	Percent of responses			
	Public		Catholic	
	Program	Comparison	Program	Comparison
1	2	3	4	5
Positive answers				
No response	22%	13%	25%	28%
Friendly, nice	49	60	41	38
Sensitive to others	4	4	9	9
Thrifty, works hard	2	0	0	0
Even temper, stable	0	0	0	0
Happy, mischievous	6	4	3	9
Smart, good in school . .	6	6	3	3
Leader, suggests games . .	2	0	0	0
Likes sports, athlete	9	13	19	13
Likes hobbies	0	0	0	0
Total	100%	100%	100%	100%
Negative answers				
Nothing negative	70%	94%	76%	82%
People don't like me . . .	4	2	9	0
Bossy, rough, mean	13	2	3	9
Lazy, greedy, spendthrift	2	0	3	0
Bad temper, unstable . . .	7	2	3	6
Sad, boring	2	0	0	0
Dumb, critical of ability .	0	0	0	0
Shy, retiring	2	0	3	3
Doesn't like sports	0	0	3	0
Total	100%	100%	100%	100%

TABLE II.35

PUPILS' PARENTS RESPONSES ON SIBLING INFORMATION

Item	Percent of responses							
	1964-65				1965-66			
	Public Pro.	Comp.	Catholic Pro.	Comp.	Public Pro.	Comp.	Catholic Pro.	Comp.
1	2	3	4	5	6	7	8	9
Number of siblings								
One	0%	5%	7%	4%	6%	6%	0%	3%
Two	40	28	18	18	32	32	13	19
Three	26	36	13	18	30	32	19	25
Four	18	26	25	28	17	15	25	34
Five	11	3	21	15	15	11	19	16
Six	5	2	7	4	0	4	9	0
Seven and over	0	0	9	9	0	0	9	0
No answer	0	0	0	4	0	0	6	3
Total	100%	100%	100%	100%	100%	100%	100%	100%
Birth order of sibling in program								
First	34%	46%	19%	34%	43%	47%	47%	31%
Second	24	31	34	32	43	30	28	41
Third	10	15	19	9	10	13	10	16
Fourth	3	8	9	7	2	6	3	9
Fifth and over	0	0	3	9	2	4	6	0
No answer	29	0	16	9	0	0	6	3
Total	100%	100%	100%	100%	100%	100%	100%	100%

TABLE II.36

SOCIO-ECONOMIC STATUS OF PUPILS' PARENTS

Item	Class of:	Percent of responses							
		1964-65				1965-66			
		<u>Public</u> Pro.	<u>Comp.</u>	<u>Catholic</u> Pro.	<u>Comp.</u>	<u>Public</u> Pro.	<u>Comp.</u>	<u>Catholic</u> Pro.	<u>Comp.</u>
1		2	3	4	5	6	7	8	9
GROUP *									
I		28%	13%	16%	12%	21%	28%	25%	9%
II		15	23	12	19	17	21	9	25
III		3	21	25	28	26	17	37	19
IV		21	5	16	19	21	17	13	19
V		13	28	22	6	11	15	13	19
VI		15	7	9	16	4	2	3	3
VII		5	3	0	0	0	0	0	3
No response		0	0	0	0	0	0	0	3
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%

* GROUP

- I High executives of large concerns and major professionals.
- II Business managers of medium sized businesses and lesser professionals.
- III Administrative personnel, owners of small businesses.
- IV Clerical and sales workers, technicians, etc.
- V Skilled manual employees.
- VI Machine operators and non-skilled employees.
- VII Unskilled employees.

Source:

Index of Social Position - Seven Socio-Economic Scale Positions
by - A. B. Hollingshead - Yale University.

TABLE II.37

READING INTERESTS OF PUPILS' PARENTS

Item	Class of:	Percent of responses							
		1964-65				1965-66			
		<u>Public</u> Pro.	Comp.	<u>Catholic</u> Pro.	Comp.	<u>Public</u> Pro.	Comp.	<u>Catholic</u> Pro.	Comp.
1		2	3	4	5	6	7	8	9
Weekly reading									
Newspapers									
None		13%	5%	6%	9%	14%	5%	9%	9%
0 to 5 hours		57	55	52	42	57	64	59	45
5 to 10 hours		26	37	36	44	29	30	30	46
10 hours and over		4	3	6	5	0	1	2	0
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%
Magazines									
None		*	*	*	*	22%	8%	17%	11%
0 to 5 hours						64	79	72	73
5 to 10 hours						12	10	8	14
10 hours and over						2	3	3	2
TOTAL		0%	0%	0%	0%	100%	100%	100%	100%
Books									
None		32%	21%	23%	22%	27%	29%	29%	31%
0 to 5 hours		42	53	44	59	46	62	47	55
5 to 10 hours		20	23	22	14	19	7	19	12
10 hours and over		6	3	11	5	8	2	5	2
TOTAL		100%	100%	100%	100%	100%	100%	100%	100%

* This question was not included in the questionnaire at that time.

TABLE II.38

CIVIC ACTIVITIES OF PUPILS' PARENTS

Item	<u>Percent of each activity</u>							
	<u>1964-65</u>				<u>1965-66</u>			
	<u>Public</u> Pro.	Comp.	<u>Catholic</u> Pro.	Comp.	<u>Public</u> Pro.	Comp.	<u>Catholic</u> Pro.	Comp.
1	2	3	4	5	6	7	8	9
Activities								
Social-fraternal	44%	65%	60%	51%	45%	52%	62%	50%
Religious	17	23	34	21	13	30	21	19
Charity-welfare	9	18	12	1	3	14	10	27
Cultural	4	3	6	0	5	5	8	8
Professional-union	13	19	20	15	18	19	21	14
Honorary	4	0	4	1	0	4	0	0
Other	0	0	1	0	3	4	0	6
PTA member	68%	95%	81%	79%	57%	87%	61%	83%

TABLE II.39

HOBBIES OF PUPILS' PARENTS

Item	<u>Percent of each hobby</u>							
	<u>1964-65</u>				<u>1965-66</u>			
	<u>Public</u> Pro.	Comp.	<u>Catholic</u> Pro.	Comp.	<u>Public</u> Pro.	Comp.	<u>Catholic</u> Pro.	Comp.
1	2	3	4	5	6	7	8	9
Hobbies								
Active sports or outdoor activity	41%	56%	44%	37%	41%	40%	41%	45%
Cultural	32	44	44	29	26	25	47	25
Collections	3	8	4	4	28	4	2	3
Crafts	25	41	27	32	23	35	27	19
Volunteer work	3	3	3	6	6	1	2	3
Home activities	14	22	20	14	7	18	14	20
Other	14	15	25	6	20	84	20	5

TABLE II.40

EDUCATION OF PUPILS' PARENTS

Item	<u>Percent of responses</u>							
	Class of:		<u>1964-65</u>		<u>1965-66</u>			
	<u>Public</u>		<u>Catholic</u>		<u>Public</u>		<u>Catholic</u>	
	Pro.	Comp.	Pro.	Comp.	Pro.	Comp.	Pro.	Comp.
1	2	3	4	5	6	7	8	9
Education								
College Degree	29%	26%	37%	12%	34%	29%	36%	19%
Non-degree	17	14	24	15	23	21	17	19
High School Diploma	26	42	27	44	26	35	33	45
Non-diploma	9	14	4	11	6	9	6	6
Elementary	5	0	6	4	3	5	0	5
No response	11	4	2	14	8	1	8	6
Total	100%	100%	100%	100%	100%	100%	100%	100%

TABLE II.41

PARENTAL APPRAISAL OF CHILD'S HEALTH AND PHYSICAL FITNESS

Item	<u>Percent of each area</u>							
	Class of:		<u>1964-65</u>		<u>1965-66</u>			
	<u>Public</u>		<u>Catholic</u>		<u>Public</u>		<u>Catholic</u>	
	Pro.	Comp.	Pro.	Comp.	Pro.	Comp.	Pro.	Comp.
1	2	3	4	5	6	7	8	9
Areas								
Health complaints	15%	20%	32%	16%	20%	24%	19%	25%
Coordination	5	13	15	24	14	13	12	6
Diet	18	23	13	24	27	17	22	22
Sleep	23	13	24	16	10	3	9	9

TABLE II.42 PARENTAL APPRAISAL OF CHILD'S SUPERIOR ABILITY

Item	Percent of responses							
	Class of:							
	1964-65				1965-66			
	Public	Catholic	Public	Catholic	Public	Catholic	Public	Catholic
	Pro.	Comp.	Pro.	Comp.	Pro.	Comp.	Pro.	Comp.
1	2	3	4	5	6	7	8	9
Areas								
Intellectual curiosity .	8%	8%	7%	0%	3%	0%	6%	6%
Self-sufficiency	0	3	13	0	3	3	3	0
Early speech	5	5	7	3	8	3	9	6
Good memory	5	3	0	0	3	7	12	3
Ability at games	0	3	0	0	0	0	3	3
Early reader	10	0	3	7	7	7	3	6
Large vocabulary	0	0	0	0	3	7	9	6
Early writer	3	0	0	0	3	0	3	0
Number ability	8	0	0	3	8	3	3	3
Artistic ability	8	5	0	3	0	9	0	0
Learned easily	13	15	9	18	8	9	6	6
Vivid imagination . . .	0	0	0	7	3	3	3	0
Strong concentration .	3	17	17	7	3	3	0	3
Leadership	0	5	3	3	0	0	0	3
Social maturity	10	0	0	0	0	3	3	0
Early walker	8	5	9	3	3	3	0	3
Good coordination . .	0	0	7	3	8	3	0	0
Other	2	5	7	9	0	0	9	6
No response	15	26	18	34	37	37	28	46
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%

TABLE II.43 PARENTAL APPRAISAL OF CHILD'S PROBLEMS AT HOME

Item	Percent of responses							
	Class of:							
	1964-65				1965-66			
	Public	Catholic	Public	Catholic	Public	Catholic	Public	Catholic
	Pro.	Comp.	Pro.	Comp.	Pro.	Comp.	Pro.	Comp.
1	2	3	4	5	6	7	8	9
Problems								
Procrastination, lack of responsibility	7%	13%	6%	13%	6%	4%	6%	18%
Bossiness, argumentative bad temper	7	13%	9	28	37	86	37	68
Other	19	13	22	18	13	3	6	0
No response	67	65	63	41	44	7	51	14
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%

TABLE II.44 PARENTAL APPRAISAL OF CHILD'S HOBBIES

1	Percent of responses							
	1964-65				1965-66			
	Public		Catholic		Public		Catholic	
	Pro.	Comp.	Pro.	Comp.	Pro.	Comp.	Pro.	Comp.
2	3	4	5	6	7	8	9	
Hobbies								
Sports	8%	3%	13%	7%	4%	3%	0%	0%
Model building	8	10	3	13	7	14	0	12
Sewing	8	5	0	8	4	6	6	10
Reading	5	7	9	0	7	4	9	10
Projects	5	5	7	7	7	4	9	10
Collections	54	64	53	52	41	52	59	43
Other	8	3	9	13	14	0	6	0
No response	4	3	6	0	16	17	11	15
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%

TABLE II.45 PARENTAL APPRAISAL OF CHILD'S INTERACTION WITH PLAYMATES

Item	Percent of responses							
	1964-65				1965-66			
	Public		Catholic		Public		Catholic	
	Pro.	Comp.	Pro.	Comp.	Pro.	Comp.	Pro.	Comp.
2	3	4	5	6	7	8	9	
Ability of pupil to get along with others								
Not well	8%	5%	7%	18%	0%	0%	3%	9%
Average	87	90	93	82	94	94	88	82
Very well	5	5	0	0	6	6	3	6
No response	0	0	0	0	0	0	6	3
Total	100%	100%	100%	100%	100%	100%	100%	100%

TABLE II.46 PARENTAL APPRAISAL OF CHILD'S READING INTERESTS

Item	Percent of responses							
	Class of: 1964-65				1965-66			
	Public		Catholic		Public		Catholic	
	Pro.	Comp.	Pro.	Comp.	Pro.	Comp.	Pro.	Comp.
1	2	3	4	5	6	7	8	9
Reading interests								
Magazines	18%	21%	22%	16%	24%	37%	15%	12%
Newspapers	3	0	3	3	3	4	3	6
Comic books	0	13	18	3	0	0	9	3
Fiction	33	33	13	34	25	21	34	32
Non-fiction	38	27	35	41	36	21	33	38
Poetry	0	0	0	3	0	0	0	0
Little reading	0	0	0	0	0	3	0	0
Avid reader	3	3	0	0	8	10	0	3
Other	0	0	9	0	0	0	0	3
None	5	5	0	0	4	4	6	3
Total	100%	100%	100%	100%	100%	100%	100%	100%

TABLE II.47 PARENTAL APPRAISAL OF CHILD'S CLOSEST FRIENDS

Item	Percent of responses							
	Class of: 1964-65				1965-66			
	Public		Catholic		Public		Catholic	
	Pro.	Comp.	Pro.	Comp.	Pro.	Comp.	Pro.	Comp.
1	2	3	4	5	6	7	8	9
Number of closest friends								
One	3%	5%	0%	0%	4%	3%	6%	3%
Two	0	3	9	7	9	13	12	6
Three	5	21	13	15	28	25	12	21
Four	28	18	18	13	13	27	21	9
Five	13	10	13	15	35	24	38	46
Six	15	18	9	18	4	4	0	0
Seven	8	10	7	3	0	0	0	0
Eight	20	15	31	26	0	0	0	0
No response	8	0	0	3	7	4	11	15
Total	100%	100%	100%	100%	100%	100%	100%	100%

TABLE II.48

PARENTAL APPRAISAL OF CHILD'S SPECIAL TALENTS

Item	Class of:		<u>Percent of responses</u>					
			<u>1964-65</u>		<u>1965-66</u>			
	<u>Public</u>		<u>Catholic</u>		<u>Public</u>		<u>Catholic</u>	
	Pro.	Comp.	Pro.	Comp.	Pro.	Comp.	Pro.	Comp.
1	2	3	4	5	6	7	8	9
Special talents								
Art, music, etc. . . .	26%	26%	18%	18%	26%	35%	28%	32%
School subjects . . .	22	37	35	31	26	20	28	18
Sports	15	21	15	15	14	10	6	12
Skills in working								
with others	8	3	13	7	4	13	12	25
Other	0	0	3	3	4	0	3	3
No response	29	13	16	26	26	22	23	10
Total	100%	100%	100%	100%	100%	100%	100%	100%

APPENDIX - B

TABLE V.1
SIGNIFICANCE OF DIFFERENCE OF STEP SCORES FOR
PUBLIC FOURTH GRADE PUPILS CLASSIFIED AS "SUPERIOR"
CLASS OF 1964-65 (N=15)

Item	Program		Comparison		t-tests	significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 3A)						
Mathematics	255	12.5	257	9.8	-1.198	n.s.
Science	264	7.3	263	10.1	.353	n.s.
Writing	258	12.8	261	14.0	- .672	n.s.
Reading	271	13.0	268	13.4	.649	n.s.
Social Studies	258	6.0	252	8.4	2.561	.02 - .01

"Superior" classification is an I.Q. of 140 and above.

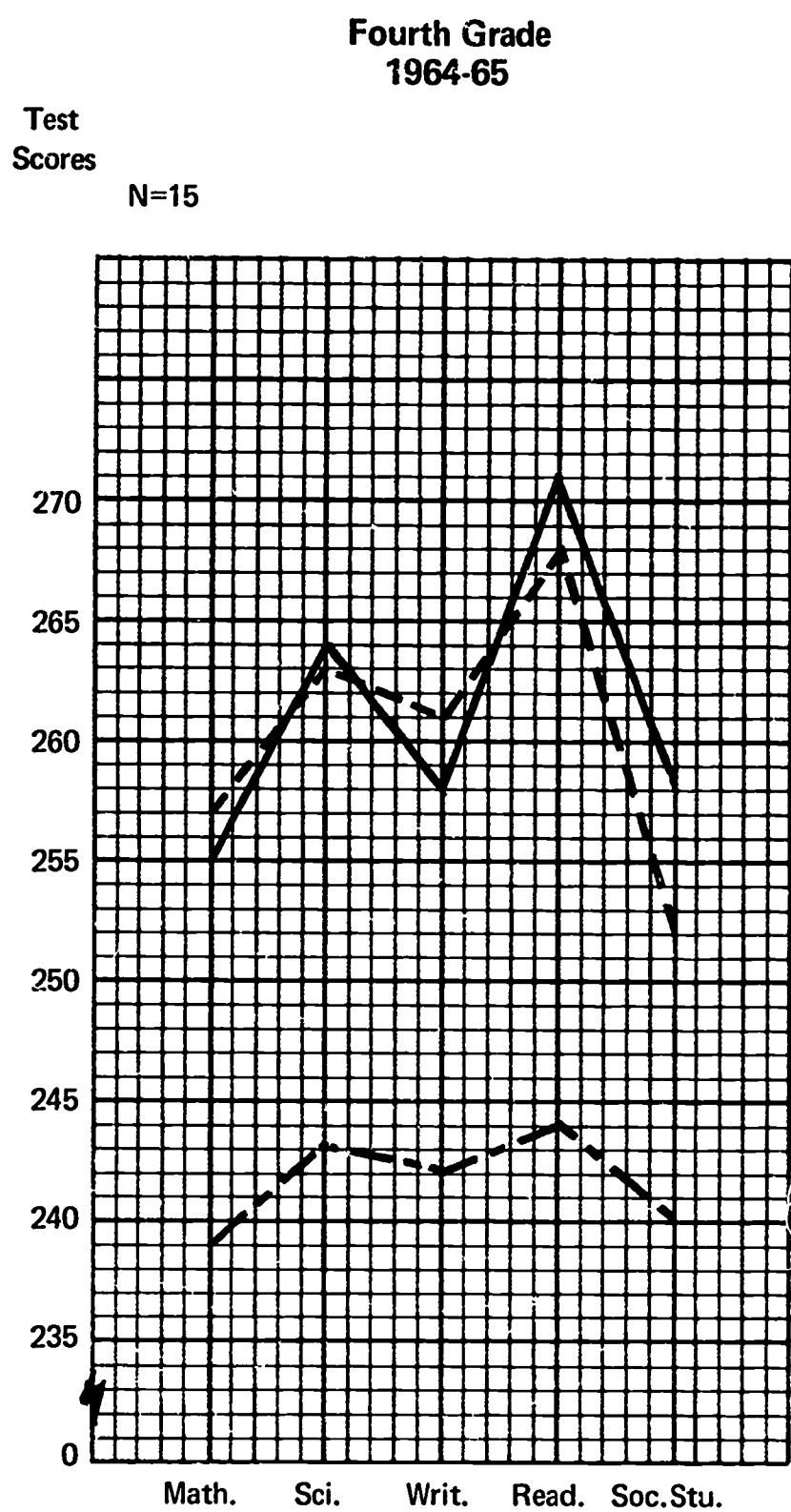
TABLE V.2
SIGNIFICANCE OF DIFFERENCE OF STEP SCORES FOR
PUBLIC EIGHTH GRADE PUPILS CLASSIFIED AS "SUPERIOR"
CLASS OF 1968-69 (N=15)

Item	Program		Comparison		t-tests	significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 3A)						
Mathematics	285.9	7.0	282.5	6.4	1.322	n.s.
Science	293.3	8.4	286.4	9.5	3.176	.001
Writing	293.7	13.1	290.7	18.3	.749	n.s.
Reading	299.7	11.7	292.8	22.4	1.364	.05 - .10
Social Studies	289.7	7.5	277.5	9.6	4.223	.001

"Superior" classification is an I.Q. of 140 and above.

Figure V.1

Means for STEP Tests for Public Eighth Grade
Pupils Classified as "Superior"
Class of 1964-65

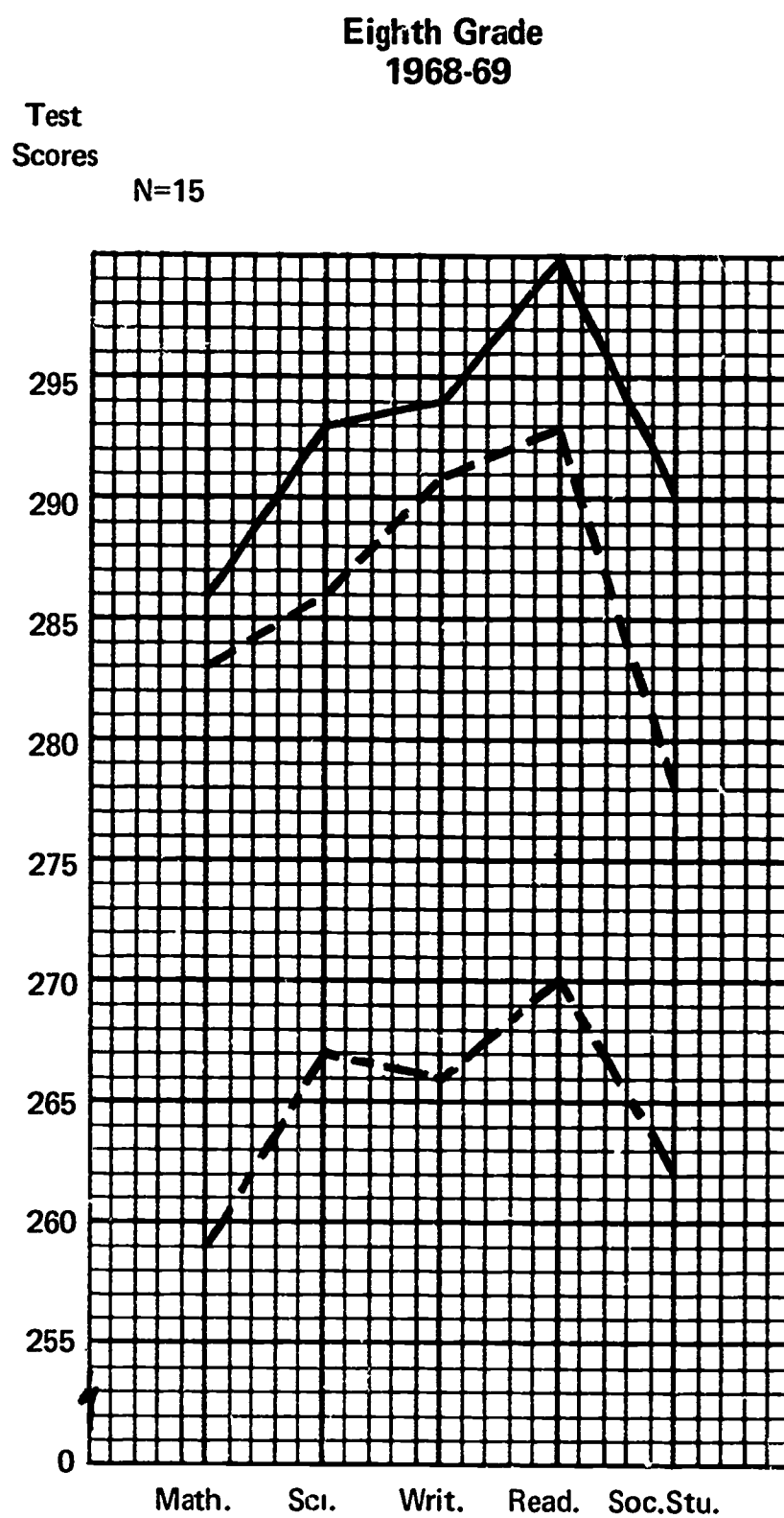


Test Form 3-A

Program _____

Comparison -----

National - - - - -



Test Form 2-A

TABLE V.3 **SIGNIFICANCE OF DIFFERENCE OF STEP SCORES FOR**
PUBLIC FOURTH GRADE PUPILS CLASSIFIED AS "SUPERIOR"
CLASS OF 1965-66 (N=14)

Item	Program		Comparison		t-tests	significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 3A)						
Mathematics	258	6.5	256	6.4	1.244	n.s.
Science	260	10.1	262	7.6	-1.031	n.s.
Writing	257	14.6	255	11.3	.494	n.s.
Reading	268	12.1	265	12.0	2.077	.05
Social Studies	257	6.5	254	7.1	1.242	n.s.

"Superior" classification is an I.Q. of 140 and above.

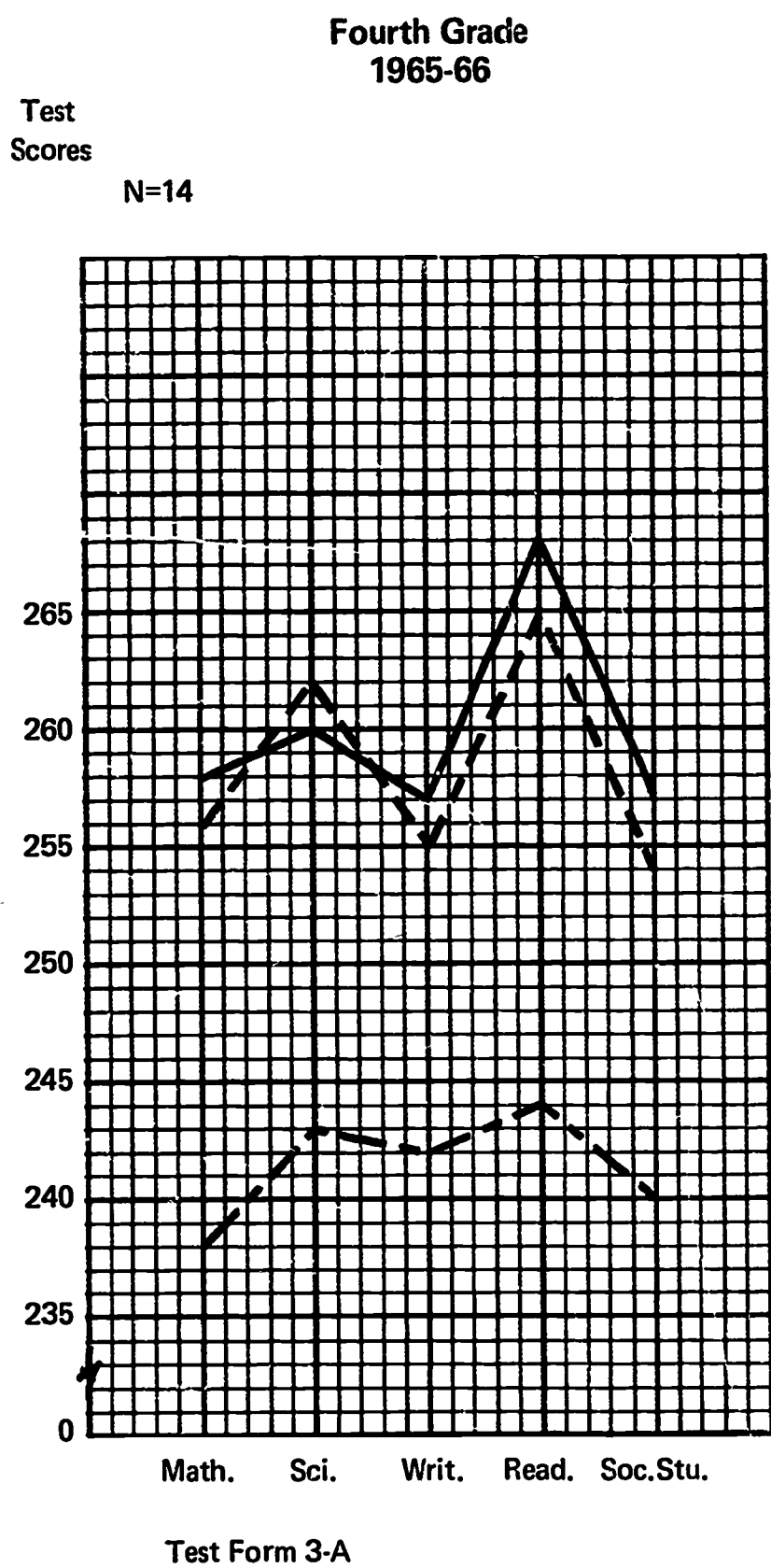
TABLE V.4 **SIGNIFICANCE OF DIFFERENCE OF STEP SCORES OF**
PUBLIC SEVENTH GRADE PUPILS CLASSIFIED AS "SUPERIOR"
CLASS OF 1968-69 (N=14)

Item	Program		Comparison		t-tests	significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 2-A)						
Mathematics	278.0	7.8	277.9	12.4	.022	n.s.
Science	284.9	7.7	283.2	10.9	.552	n.s.
Writing	284.3	13.5	279.2	18.6	.954	n.s.
Reading	292.1	15.0	287.4	16.2	.796	n.s.
Social Studies	276.6	5.6	275.9	7.5	.291	n.s.

"Superior" classification is an I.Q. of 140 and above.

Figure V.2

**Means For STEP Tests For Public Seventh Grade
Pupils Classified As "Superior"
Class Of 1965 - 66**



Program _____

Comparison - - - - -

National — — — — —

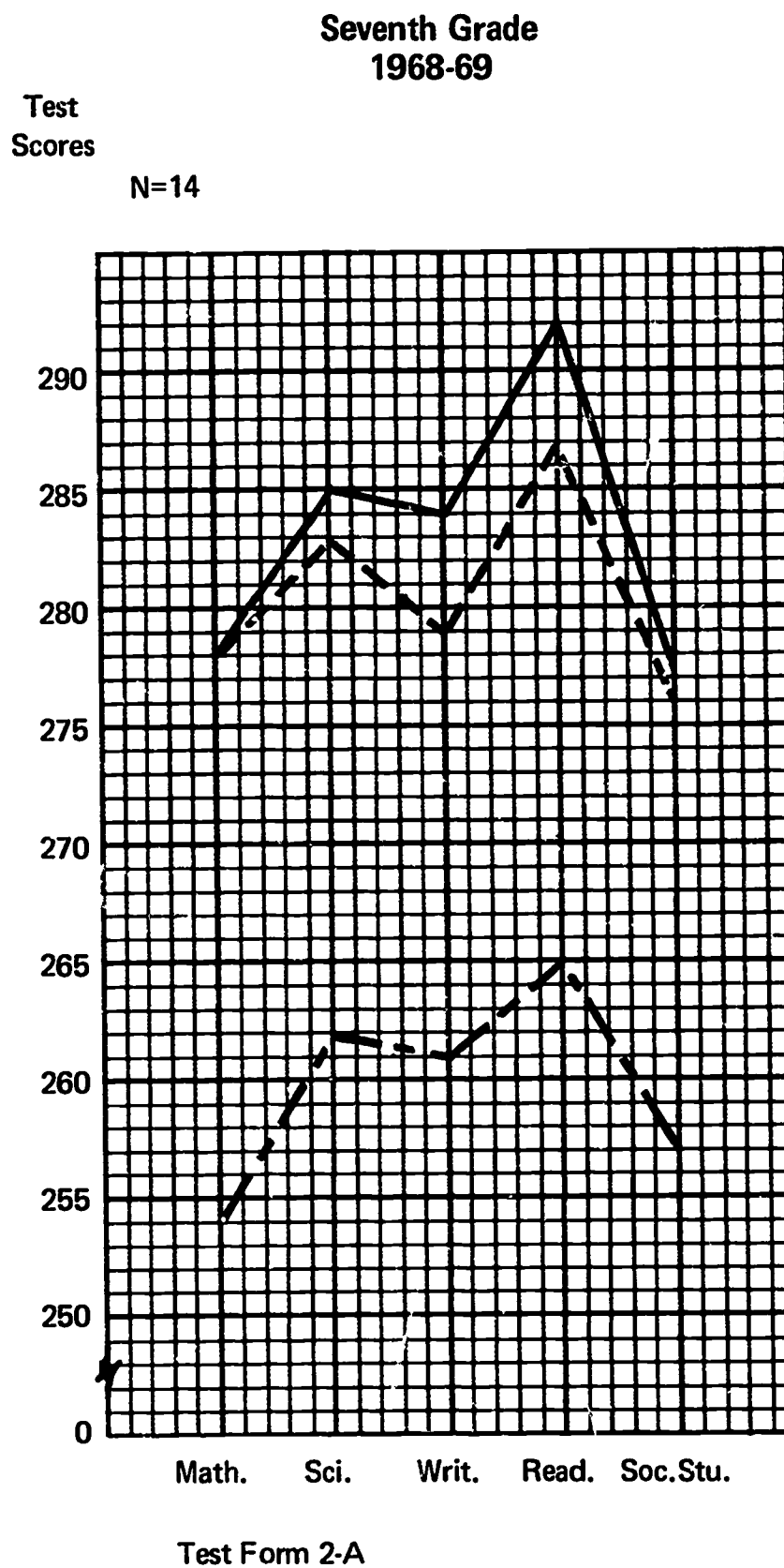


TABLE V.5 SIGNIFICANCE OF DIFFERENCE OF STEP SCORES
OF PUBLIC FOURTH GRADE PUPILS CLASSIFIED AS "VERY TALENTED"
CLASS OF 1964-65 (N=17)

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 3A)						
Mathematics	256	6.4	257	7.2	- .471	n.s.
Science	263	5.8	260	4.8	1.137	n.s.
Writing	261	9.9	260	9.5	.234	n.s.
Reading	269	9.8	264	9.7	1.677	.05 - .10
Social Studies	257	6.7	253	4.7	1.681	.05 - .10

"Very Talented" classification is an I.Q. of 130 - 139.

TABLE V.6 SIGNIFICANCE OF DIFFERENCE OF STEP SCORES
OF PUBLIC EIGHTH GRADE PUPILS CLASSIFIED AS "VERY TALENTED"
CLASS OF 1968-69 (N=17)

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 2A)						
Mathematics	282.7	8.9	279.5	7.4	1.461	.05 - .10
Science	287.8	10.9	284.6	9.9	.937	n.s.
Writing	290.2	12.6	288.7	10.1	.391	n.s.
Reading	297.4	8.0	292.7	15.8	1.003	n.s.
Social Studies	286.4	12.0	279.8	7.5	2.316	.05

"Very Talented" classification is an I.Q. of 130 - 139.

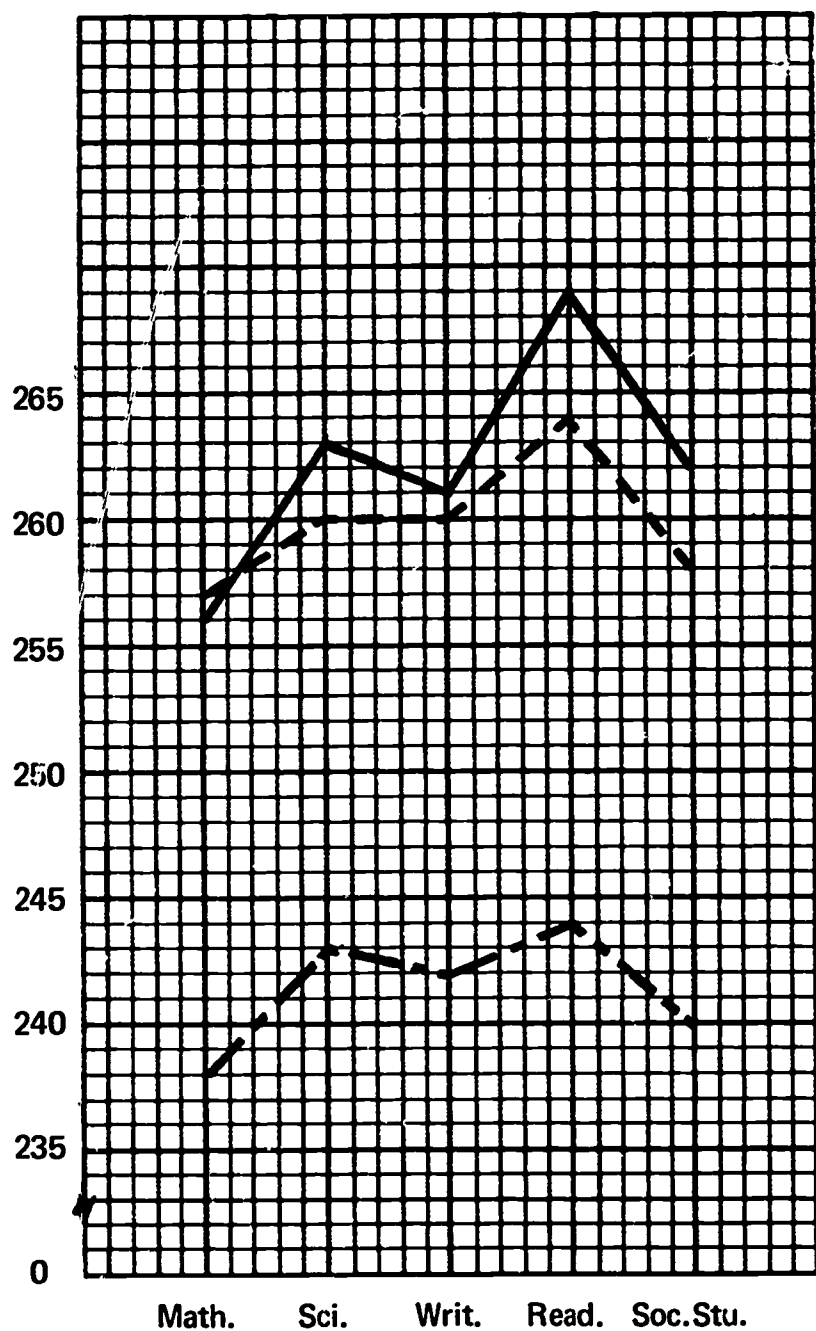
Figure V.3

**Means for STEP Tests for Public Eighth Grade
Pupils Classified as "Very Talented"
Class of 1964-65**

**FOURTH GRADE
1964-65**

Test
Scores

N=17



Test Form 3-A

Program _____

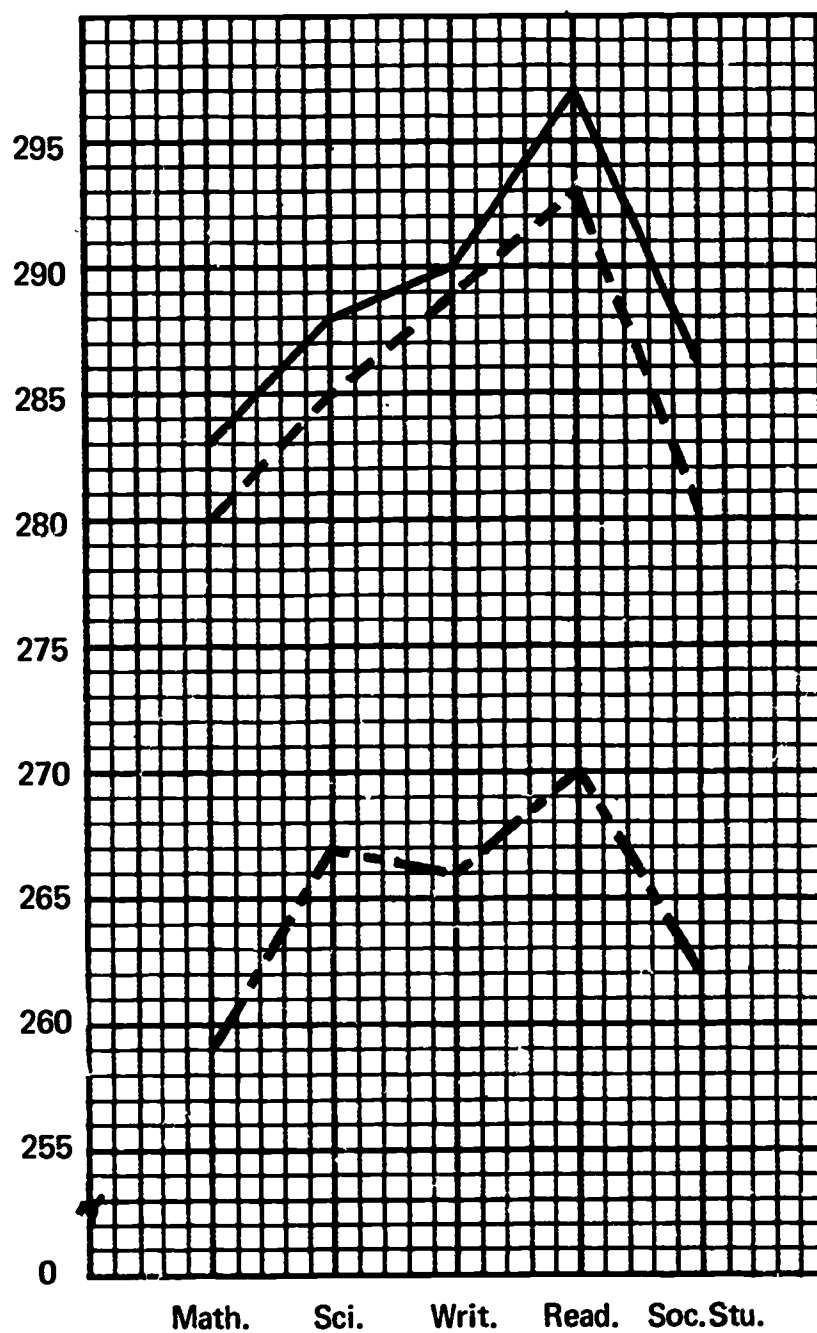
Comparison - - - - -

National - - - - -

**EIGHTH GRADE
1968-69**

Test
Scores

N=17



Test Form 2-A

TABLE V.7
SIGNIFICANCE OF DIFFERENCE OF STEP SCORES OF
PUBLIC FOURTH GRADE PUPILS CLASSIFIED AS "VERY TALENTED"
CLASS OF 1965-66 (N=16)

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 3A)						
Mathematics	251	9.9	252	10.8	- .236	n.s.
Science	260	8.4	258	8.5	.784	n.s.
Writing	262	16.5	257	14.2	1.006	n.s.
Reading	263	14.6	262	13.2	.364	n.s.
Social Studies	251	7.9	256	7.5	-2.029	.05

"Very Talented" classification is an I.Q. of 130 -- 139.

TABLE V.8
SIGNIFICANCE OF DIFFERENCE OF STEP SCORES OF
PUBLIC SEVENTH GRADE PUPILS CLASSIFIED AS "VERY TALENTED"
CLASS OF 1968-69 (N=16)

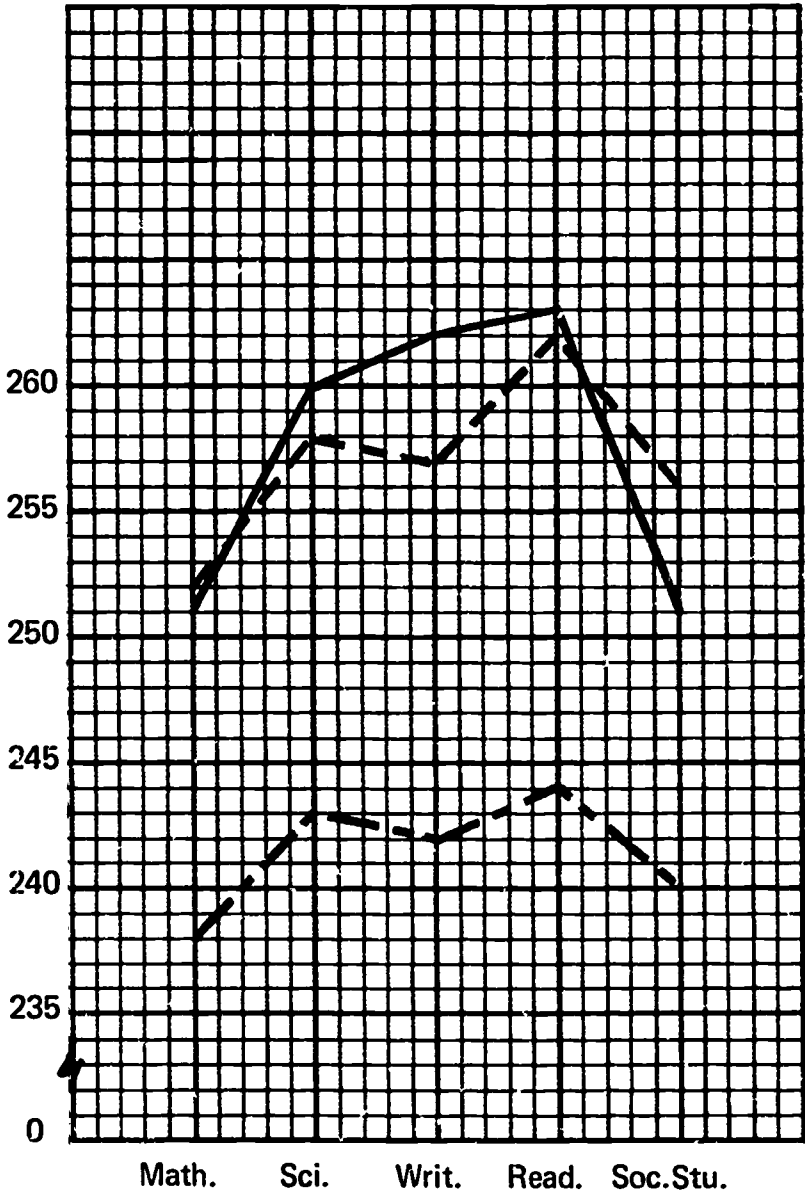
Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 2-A)						
Mathematics	276.1	8.3	275.3	7.6	.403	n.s.
Science	281.6	7.6	276.7	7.4	2.395	.05
Writing	288.4	16.2	283.2	13.0	1.045	n.s.
Reading	290.4	17.2	285.5	15.9	.733	n.s.
Social Studies	274.4	9.1	271.4	6.4	1.239	n.s.

"Very Talented" classification is an I.Q. of 130 - 139.

Figure V.4
Means For STEP Tests For Public Seventh Grade
Pupils Classified As "Very Talented"
Class Of 1965 - 66

FOURTH GRADE
1965-66

Test
Scores
N=16



Test Form 3-A

Program _____

Comparison _____

National _____

SEVENTH GRADE
1968-69

Test
Scores
N=16



Test Form 2-A

**TABLE V.9 SIGNIFICANCE OF DIFFERENCE OF STEP SCORES OF PUBLIC FOURTH GRADE
PUPILS CLASSIFIED AS "TALENTED"
CLASS OF 1964 - 65 (N=7)**

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 3A)						
Mathematics	252	7.5	253	12.0	- .320	n.s.
Science	257	8.5	259	8.9	- .388	n.s.
Writing	255	10.2	258	8.9	- .398	n.s.
Reading	264	10.7	264	7.0	- .049	n.s.
Social Studies	249	1.6	251	4.4	-1.341	n.s.

"Talented" classification is an I.Q. of 120 - 129.

**TABLE V.10 SIGNIFICANCE OF DIFFERENCE OF STEP SCORES OF PUBLIC EIGHTH GRADE
PUPILS CLASSIFIED AS "TALENTED"
CLASS OF 1968 - 69 (N=7)**

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 2A)						
Mathematics	278.1	7.2	276.1	12.2	.302	n.s.
Science	280.4	4.7	289.1	13.0	-1.722	n.s.
Writing	290.6	14.5	188.6	11.6	.357	n.s.
Reading	291.3	11.7	297.3	13.3	- .825	n.s.
Social Studies	275.1	2.6	277.4	10.0	- .516	n.s.

"Talented" classification is an I.Q. of 120 - 129.

Figure V.5

Means for STEP Tests for Public Eighth Grade
Pupils Classified as "Talented"
Class of 1964-65

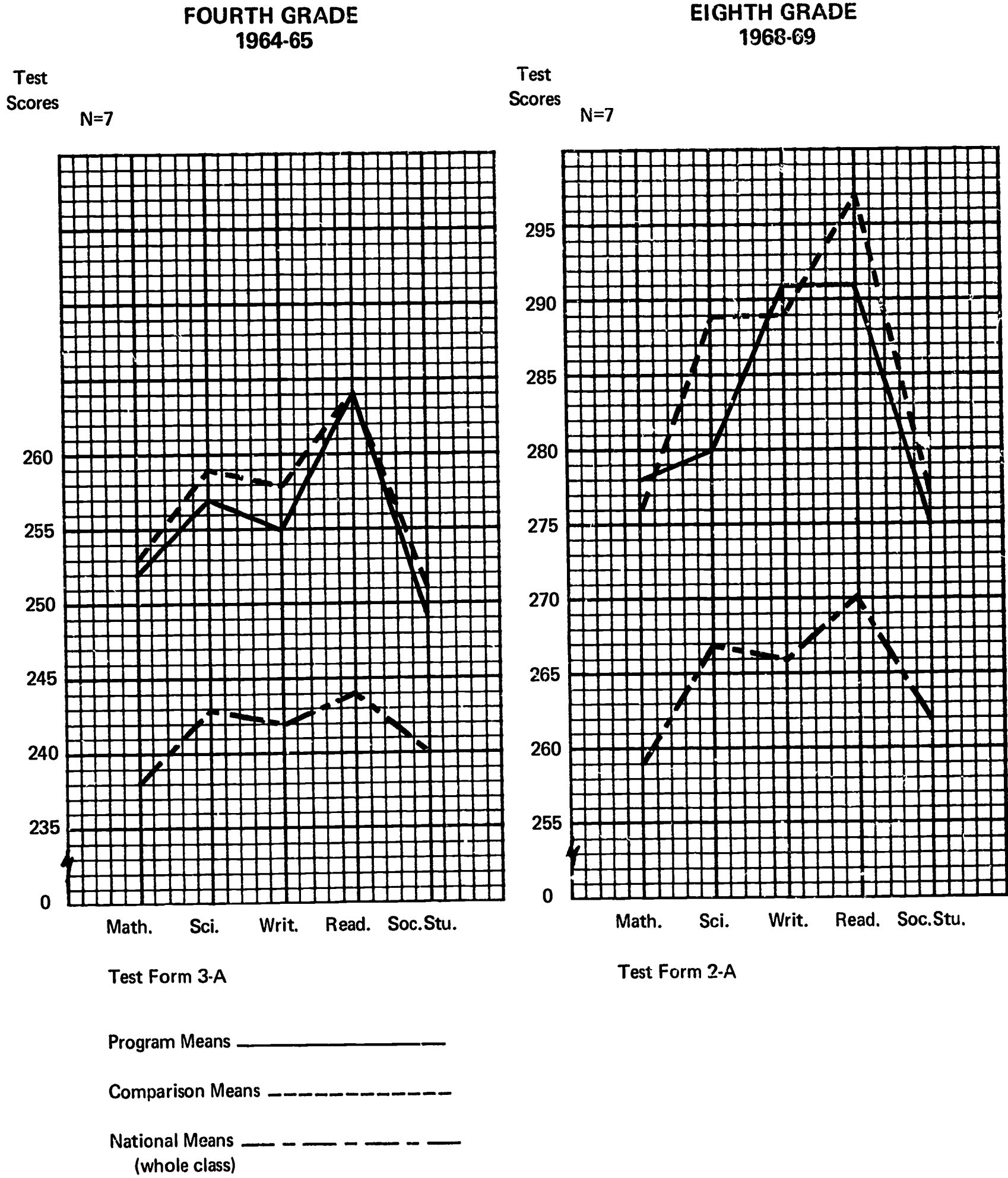


TABLE V.11 SIGNIFICANCE OF DIFFERENCE OF STEP SCORES OF PUBLIC FOURTH GRADE
PUPILS CLASSIFIED AS "TALENTED"
CLASS OF 1965 - 66 (N=17)

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 3A)						
Mathematics	250	7.2	251	9.2	- .765	n.s.
Science	253	10.2	258	10.1	-1.573	.05 - .10
Writing	258	13.2	257	12.0	.211	n.s.
Reading	261	13.4	259	12.4	1.457	.05 - .10
Social Studies	251	8.8	254	7.1	-1.280	n.s.

"Talented" classification is an I.Q. of 120 - 129.

TABLE V.12 SIGNIFICANCE OF DIFFERENCE OF STEP SCORES OF PUBLIC SEVENTH GRADE
PUPILS CLASSIFIED AS "TALENTED"
CLASS OF 1968-69 (N=17)

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 2-A)						
Mathematics	273.1	6.9	271.9	7.7	.454	n.s.
Science	276.4	8.1	277.3	9.7	.274	n.s.
Writing	278.0	16.2	283.0	12.1	1.971	.05
Reading	281.0	14.5	286.8	11.1	1.589	.05 - .10
Social Studies	271.1	7.4	272.9	7.2	.672	n.s.

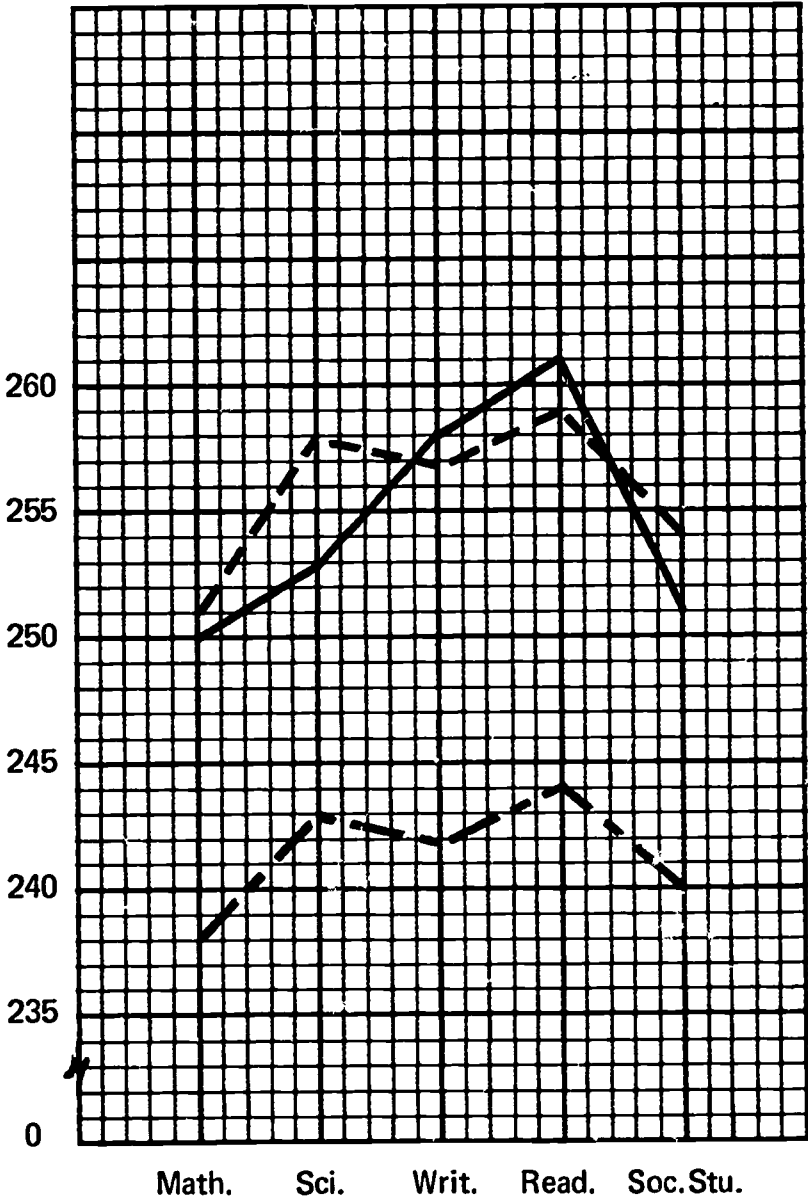
"Talented" classification is an I.Q. of 129 and below.

Figure V.6

Means For STEP Tests For Public Seventh Grade
Pupils Classified As "Talented"
Class Of 1965 - 66

FOURTH GRADE
1965-66

Test
Scores
N=17



Test Form 3-A

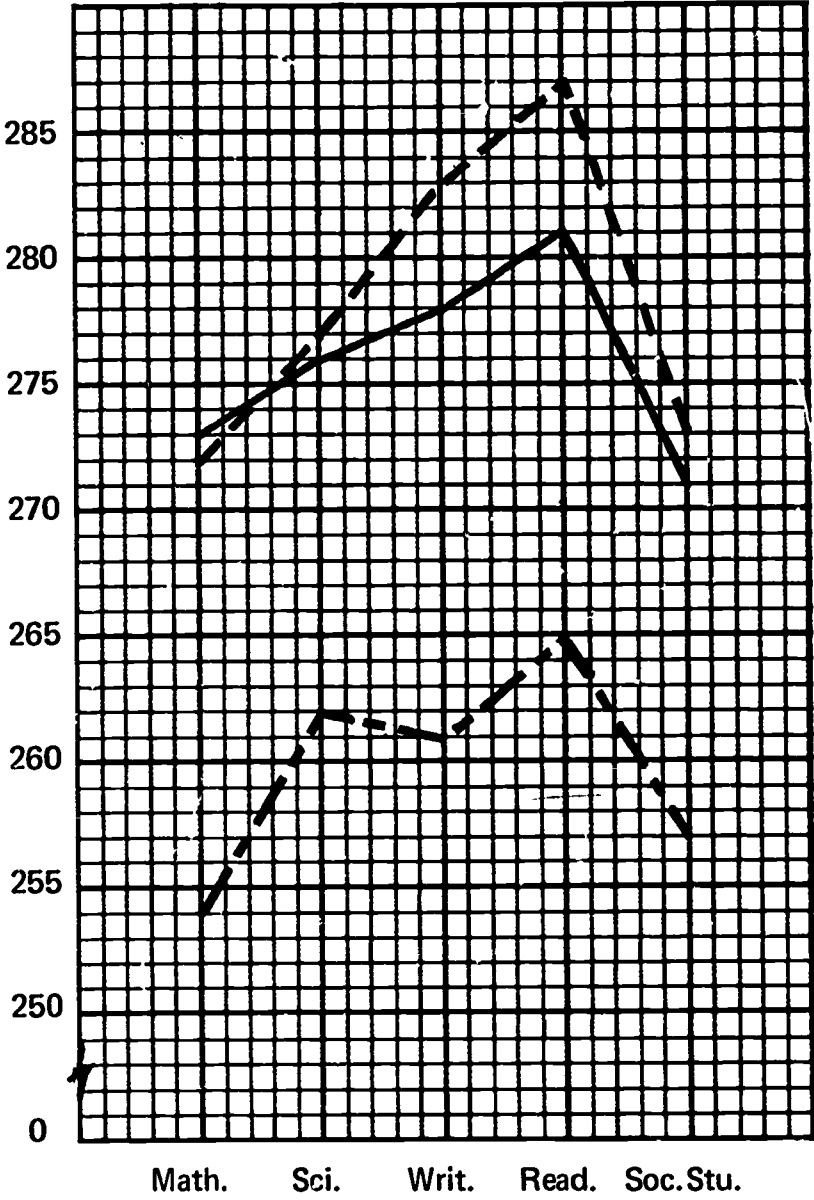
Program _____

Comparison - - - - -

National -

SEVENTH GRADE
1968-69

Test
Scores
N=17



Test Form 2-A

**TABLE V.13 SIGNIFICANCE OF DIFFERENCE OF STEP SCORES OF CATHOLIC FOURTH GRADE
PUPILS CLASSIFIED AS "SUPERIOR"
CLASS OF 1964-65 (N=9)**

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 3A)						
Mathematics	257	9.8	253	5.0	1.117	n.s.
Science	261	10.8	258	6.7	.998	n.s.
Writing	262	10.9	255	9.3	1.668	n.s.
Reading	273	12.0	265	10.4	1.707	n.s.
Social Studies	257	13.4	252	8.6	1.018	n.s.

"Superior" classification is an I.Q. of 140 and above.

**TABLE V.14 SIGNIFICANCE OF DIFFERENCE OF STEP SCORES OF CATHOLIC EIGHTH GRADE
PUPILS CLASSIFIED AS "SUPERIOR"
CLASS OF 1968-69 (N=9)**

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 2A)						
Mathematics	284.3	9.8	274.4	11.2	1.763	.05 - .10
Science	284.8	11.9	279.2	10.2	1.017	n.s.
Writing	288.4	9.0	285.6	14.8	.549	n.s.
Reading	294.4	13.5	291.3	18.4	.376	n.s.
Social Studies	278.8	13.5	276.4	12.1	.368	n.s.

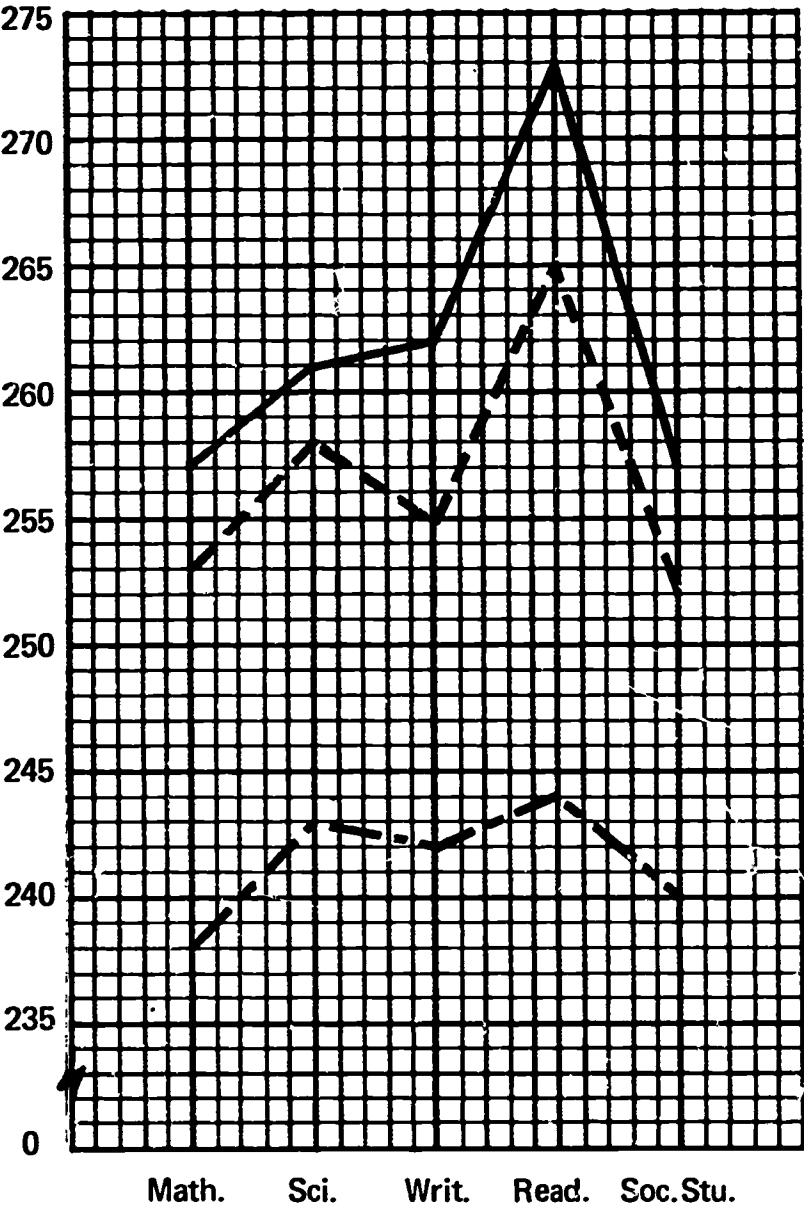
"Superior" classification is an I.Q. of 140 and above.

Figure V.7

Means for STEP Tests for Catholic Eighth Grade
Pupils Classified as "Superior"
Class of 1964-65

FOURTH GRADE
1964-65

Test
Scores
N=9



Test Form 3-A

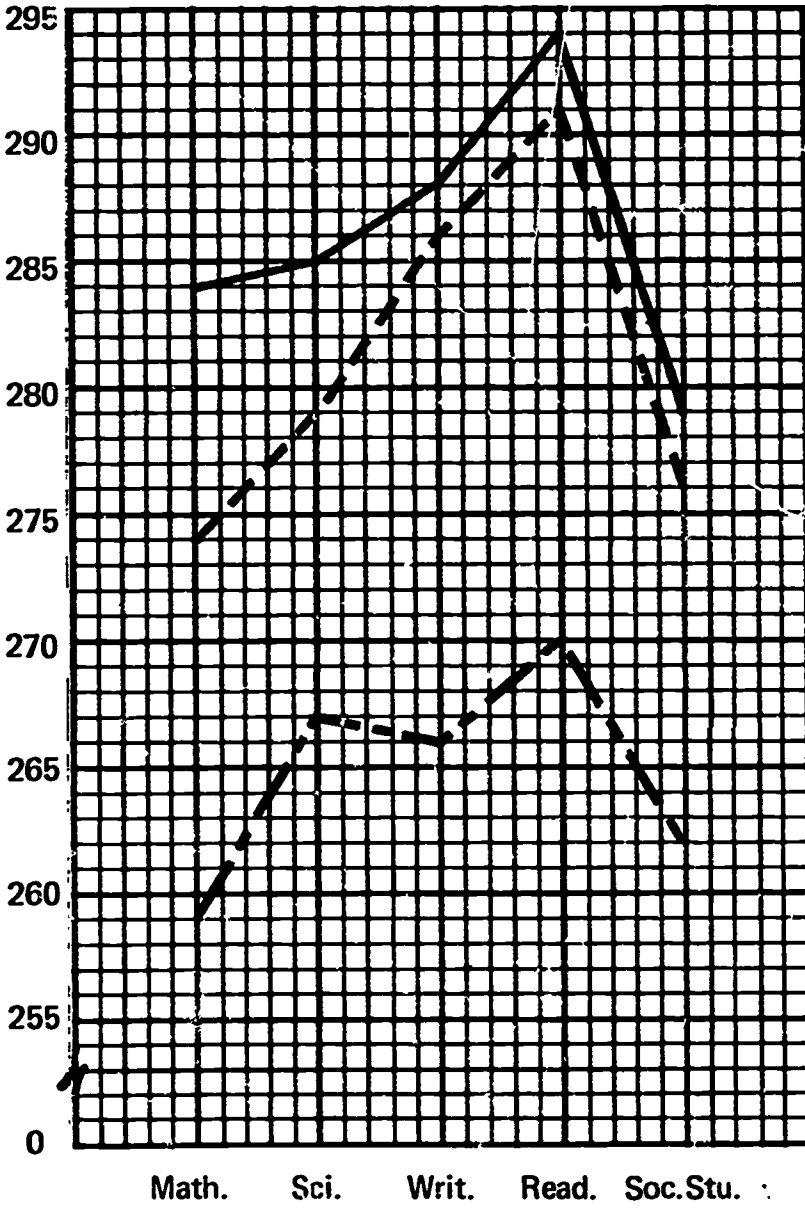
Program Means _____

Comparison Means - - - - -

National Means
(whole class)

EIGHTH GRADE
1968-69

Test
Scores
N=9



Test Form 2-A

TABLE V.15 SIGNIFICANCE OF DIFFERENCE OF STEP SCORES OF CATHOLIC FOURTH GRADE
PUPILS CLASSIFIED AS "SUPERIOR"
CLASS OF 1965-66 (N=7)

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 3A)						
Mathematics	253	8.0	251	8.3	1.216	n.s.
Science	262	4.3	263	5.6	- .284	n.s.
Writing	259	14.1	263	10.2	- .833	n.s.
Reading	272	11.1	267	11.3	1.770	.05 - .10
Social Studies	257	8.2	253	6.7	.828	n.s.

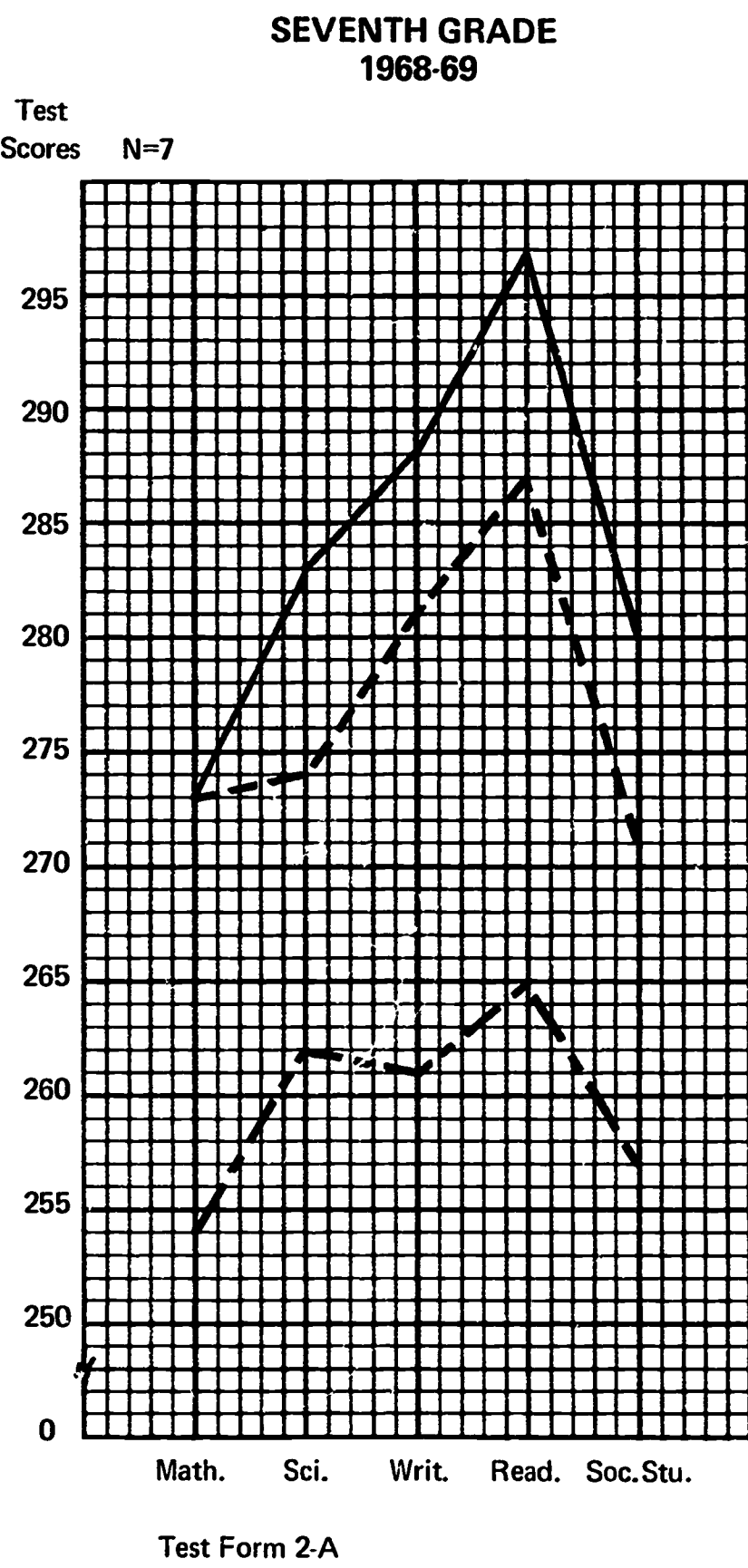
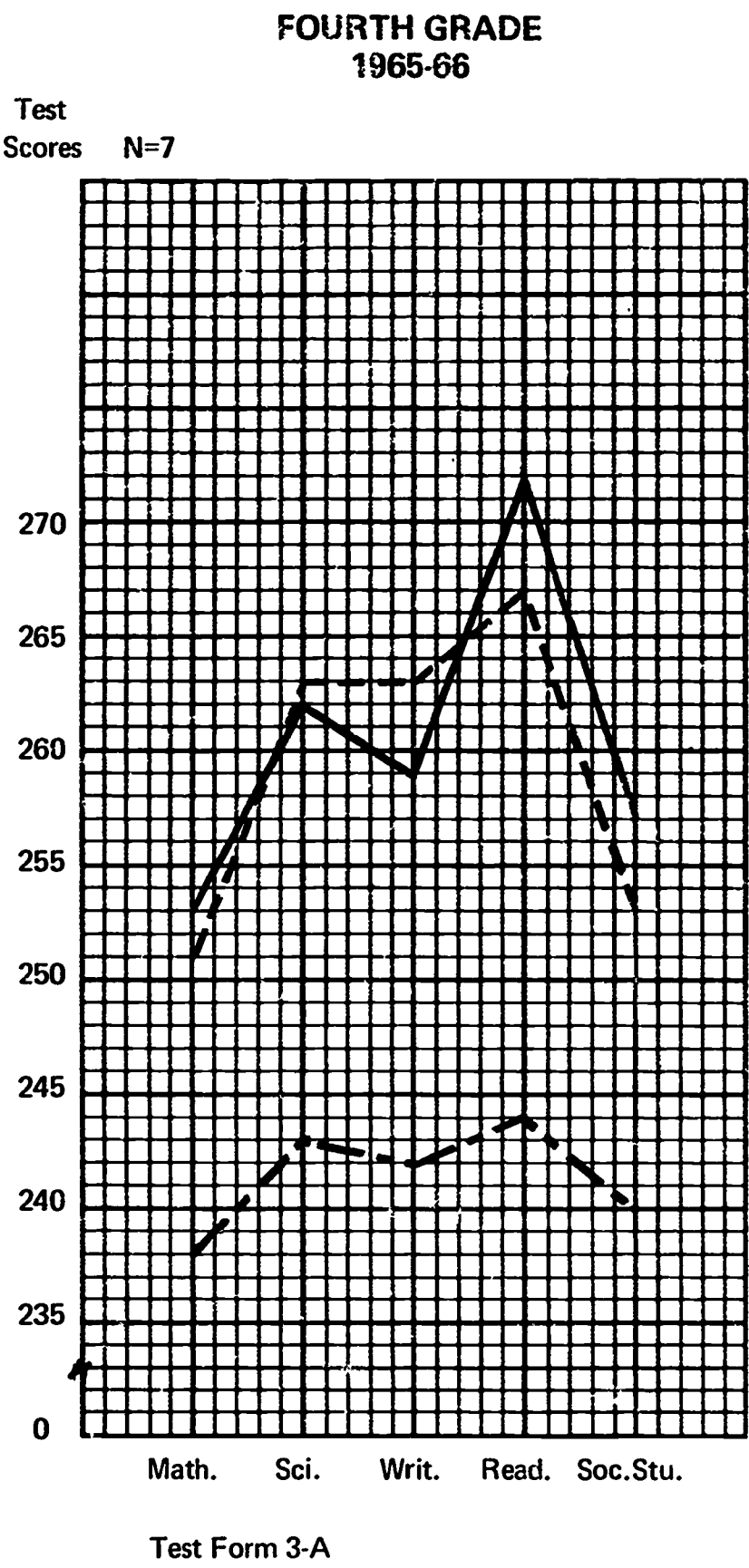
"Superior" classification is an I.Q. of 140 and above.

TABLE V.16 SIGNIFICANCE OF DIFFERENCE OF STEP SCORES OF CATHOLIC SEVENTH GRADE
PUPILS CLASSIFIED AS "SUPERIOR"
CLASS OF 1968-69 (N=7)

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 2A)						
Mathematics	273.0	2.4	273.4	10.8	- .099	n.s.
Science	282.6	8.1	273.6	12.2	1.662	.05 - .10
Writing	288.3	18.1	281.3	18.4	.754	n.s.
Reading	297.4	12.8	286.6	16.4	1.563	.05 - .10
Social Studies	279.6	8.6	270.9	15.2	1.350	.05 - .10

"Superior" classification is an I.Q. of 140 and above.

Figure V.8
Means For STEP Tests For Catholic Seventh Grade
Pupils Classified As "Superior"
Class Of 1965 - 66



Program _____

Comparison - - - - -

National - - - - -

TABLE V.17 SIGNIFICANCE OF DIFFERENCE OF STEP SCORES OF CATHOLIC FOURTH
GRADE PUPILS CLASSIFIED AS "VERY TALENTED"
CLASS OF 1964-65 (N=23)

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 3A)						
Mathematics	254	11.1	252	8.2	1.842	n.s.
Science	261	7.7	257	7.6	2.160	.05
Writing	259	11.4	258	11.2	.319	n.s.
Reading	265	10.2	262	10.9	1.612	n.s.
Social Studies	254	5.5	250	7.4	2.252	.05

"Very Talented" classification is an I.Q. of 130 - 139.

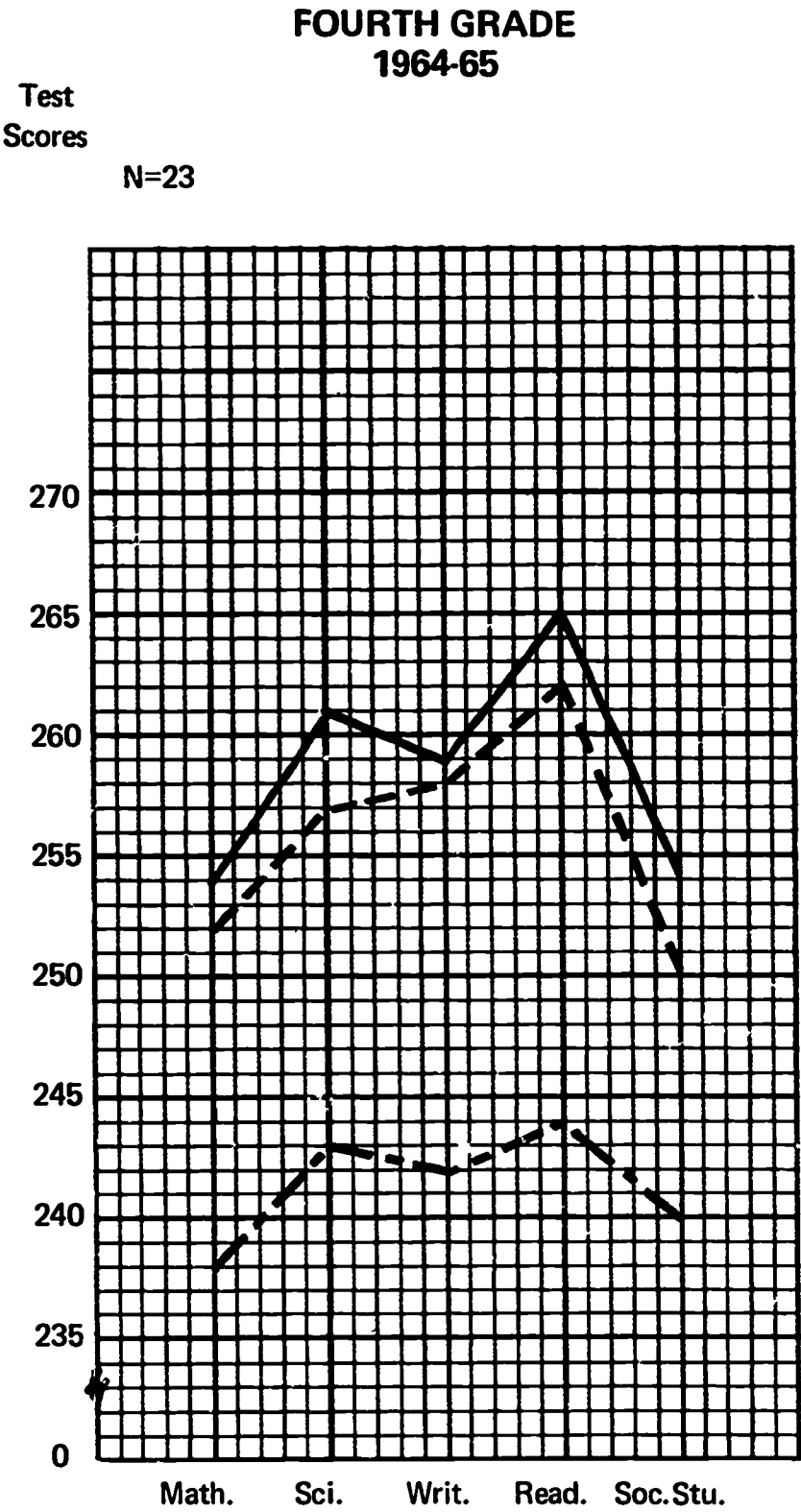
TABLE V.18 SIGNIFICANCE OF DIFFERENCE OF STEP SCORES OF CATHOLIC EIGHTH
GRADE PUPILS CLASSIFIED AS "VERY TALENTED"
CLASS OF 1968-69 (N=23)

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 2-A)						
* Mathematics	284.0	8.3	276.8	10.3	2.627	.01
* Science	287.4	9.4	277.0	10.8	3.255	.01
Writing	286.1	9.5	286.8	12.4	.258	n.s.
Reading	296.0	8.6	291.4	12.7	1.352	.05 - .10
Social Studies	283.3	8.5	279.3	12.4	1.344	.05 - .10

"Very Talented" classification is an I.Q. of 130 - 139.

* Not valid since there is a significant difference favoring the program group in I.Q.

Figure V.9 Means for STEP Tests for Catholic Eighth Grade Pupils Classified as "Very Talented" Class of 1964-65

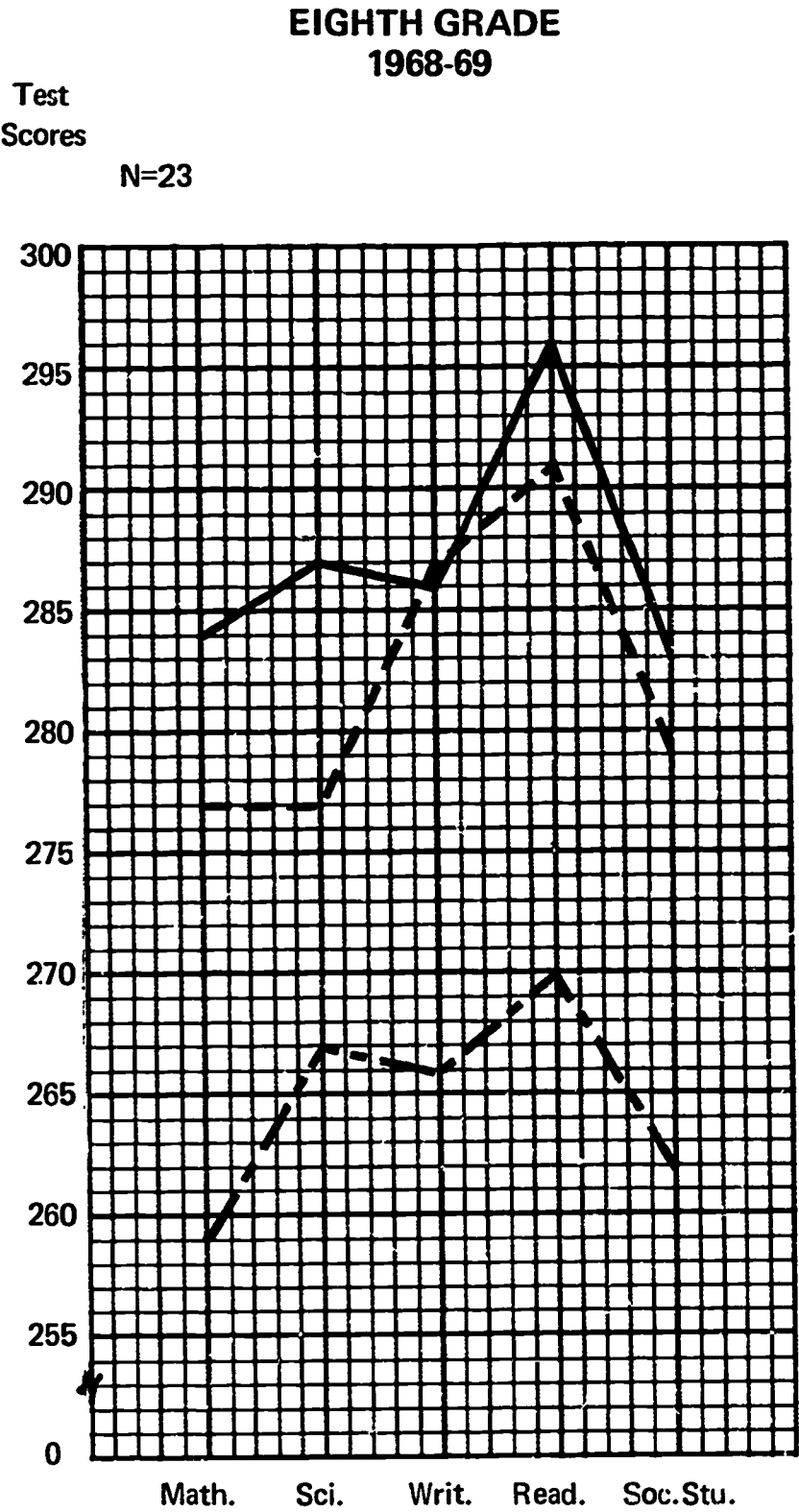


Test Form 3-A

Program _____

Comparison - - - - -

National - - - - -



Test Form 2-A

TABLE V.19 SIGNIFICANCE OF DIFFERENCE OF STEP SCORES OF CATHOLIC FOURTH
GRADE PUPILS CLASSIFIED AS "VERY TALENTED"
CLASS OF 1965-66 (N=20)

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 3A)						
Mathematics	251	7.7	251	5.4	.124	n.s.
Science	263	4.7	256	6.9	3.649	.01
Writing	261	6.7	260	10.6	.589	n.s.
Reading	270	11.3	260	10.2	4.036	.001
Social Studies	252	6.6	251	10.4	.514	n.s.

"Very Talented" classification is an I.Q. of 130 - 139.

TABLE V.20 SIGNIFICANCE OF DIFFERENCE OF STEP SCORES OF CATHOLIC SEVENTH
GRADE PUPILS CLASSIFIED AS "VERY TALENTED"
CLASS OF 1968-69 (N=20)

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 2A)						
Mathematics	272.2	5.8	271.5	5.4	.553	n.s.
Science	281.0	8.5	273.6	8.5	2.670	.01
Writing	282.2	17.1	278.3	13.0	1.081	n.s.
Reading	288.8	16.6	279.2	13.5	2.194	.05
Social Studies	277.3	9.5	270.9	10.4	1.854	.05

"Very Talented" classification is an I.Q. of 130 - 139.

Figure V.10

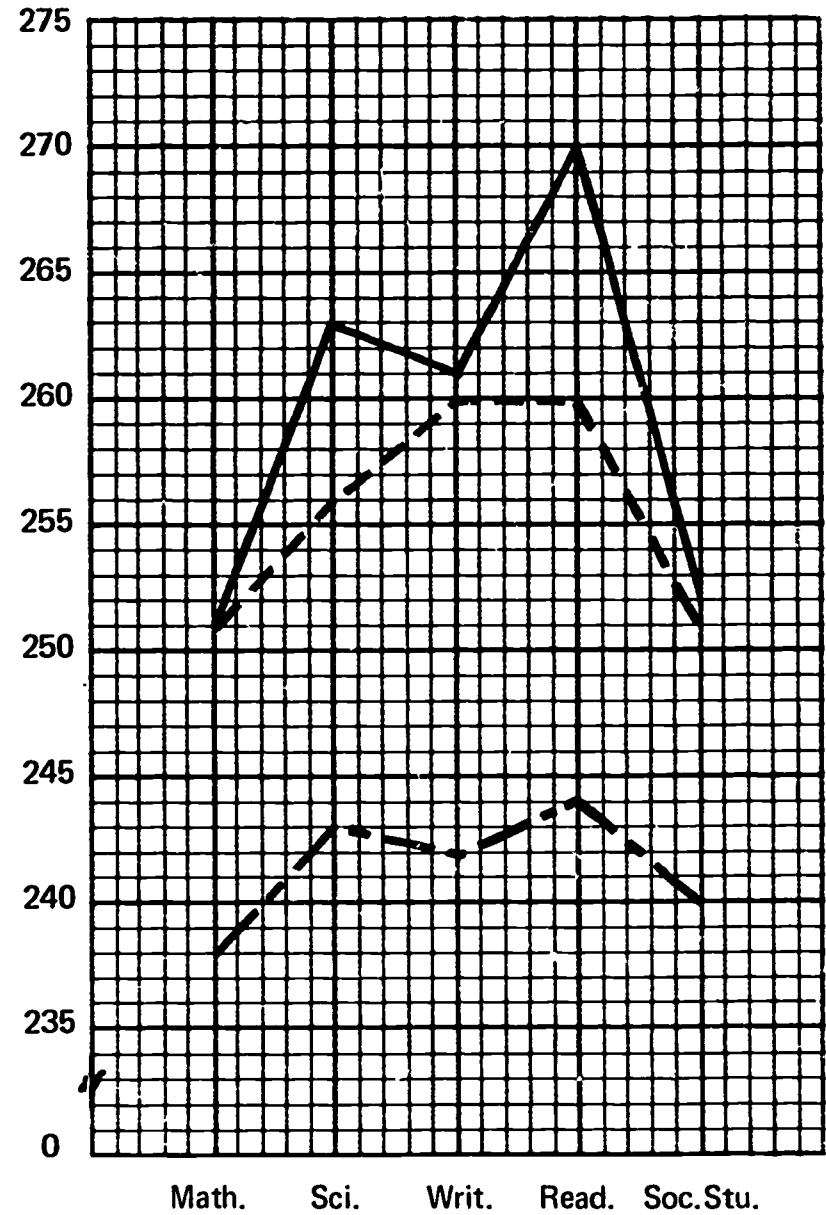
Means For STEP Tests For Catholic Seventh Grade
Pupils Classified As "Very Talented"
Class Of 1965 - 66

FOURTH GRADE
1965-66

SEVENTH GRADE
1968-69

Test
Scores

N=20



Test Form 3-A

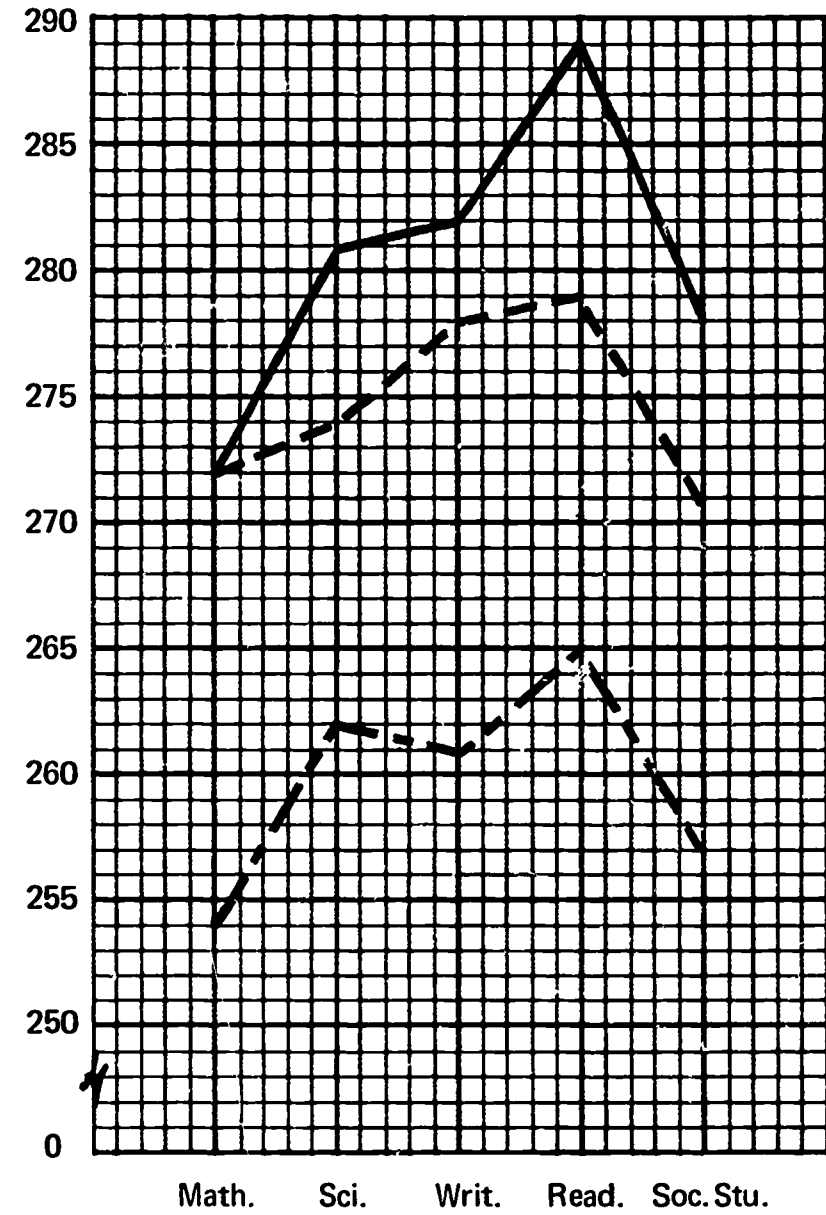
Program _____

Comparison -----

National - - - - -

Test
Scores

N=20



Test Form 2-A

Program _____

Comparison -----

National - - - - -

TABLE V.21 SIGNIFICANCE OF DIFFERENCE OF STEP SCORES OF CATHOLIC FOURTH
GRADE PUPILS CLASSIFIED AS "TALENTED"
CLASS OF 1965-66 (N=5)

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 3A)						
Mathematics	258	5.9	255	8.6	.682	n.s.
Science	265	2.5	251	10.1	3.602	.02
Writing	253	11.6	268	6.9	-2.006	.05 - .10
Reading	267	12.1	262	5.9	.898	n.s.
Social Studies	260	5.1	249	4.8	3.586	.02

"Talented" classification is an I.Q. of 120 - 129.

TABLE V.22 SIGNIFICANCE OF DIFFERENCE OF STEP SCORES OF CATHOLIC SEVENTH
GRADE PUPILS CLASSIFIED AS "TALENTED"
CLASS OF 1968-69 (N=5)

Item	Program		Comparison		t-tests	Significance
	Mean	S.D.	Mean	S.D.		
1	2	3	4	5	6	7
Tests (Form 2A)						
Mathematics	281.6	3.4	272.6	5.6	3.331	.05
Science	284.2	8.1	272.0	7.9	1.888	.05 - .10
Writing	291.0	6.9	288.0	12.0	.374	n.s.
Reading	304.6	9.0	285.0	7.8	4.064	.02
Social Studies	284.0	4.7	267.4	6.3	3.984	.02

"Talented" classification is an I.Q. of 130 - 139.

Figure V.12
Means Of Public Seventh Grade Class STEP Scores
Plotted By Grades
Class Of 1965 - 66

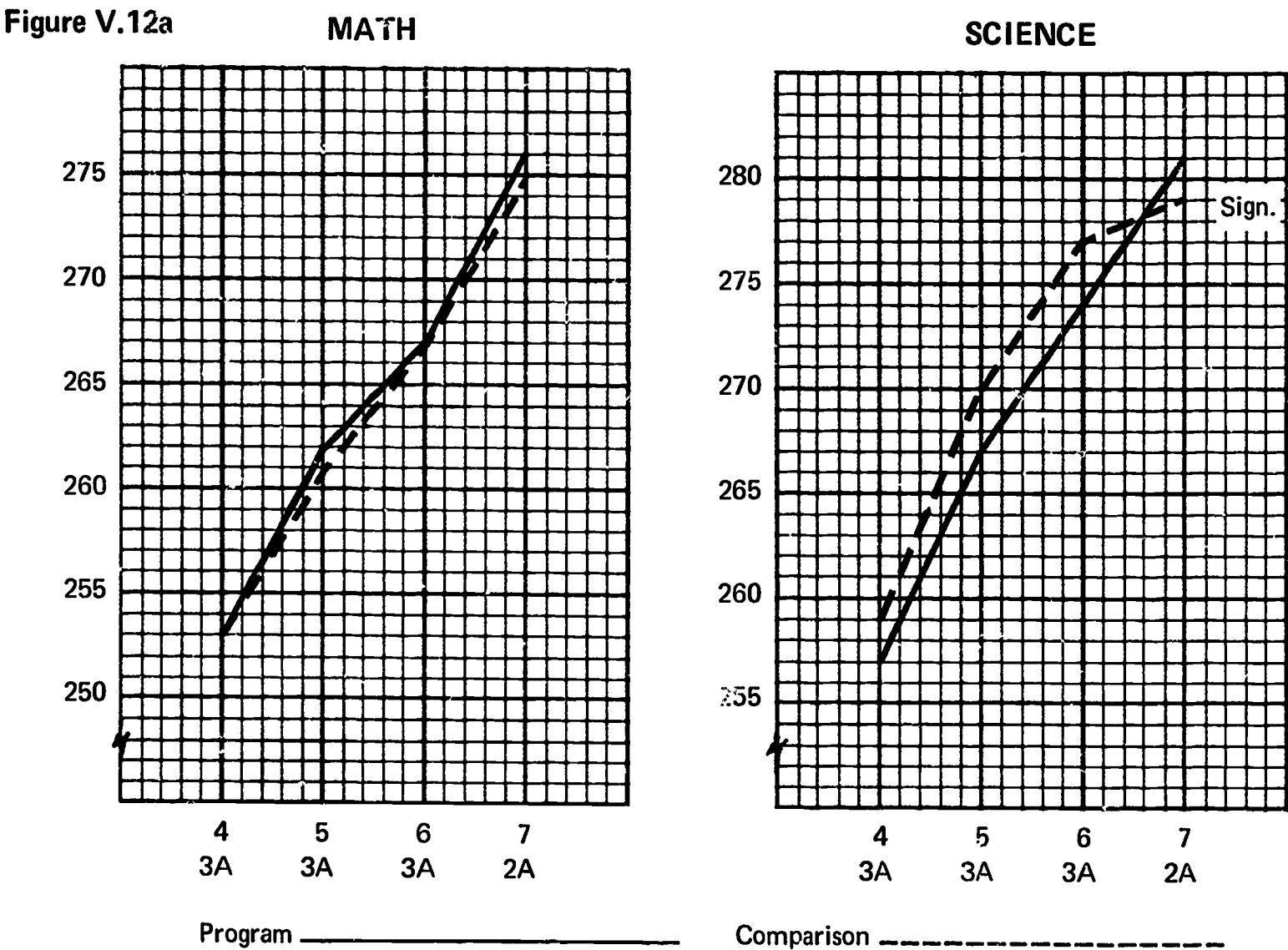
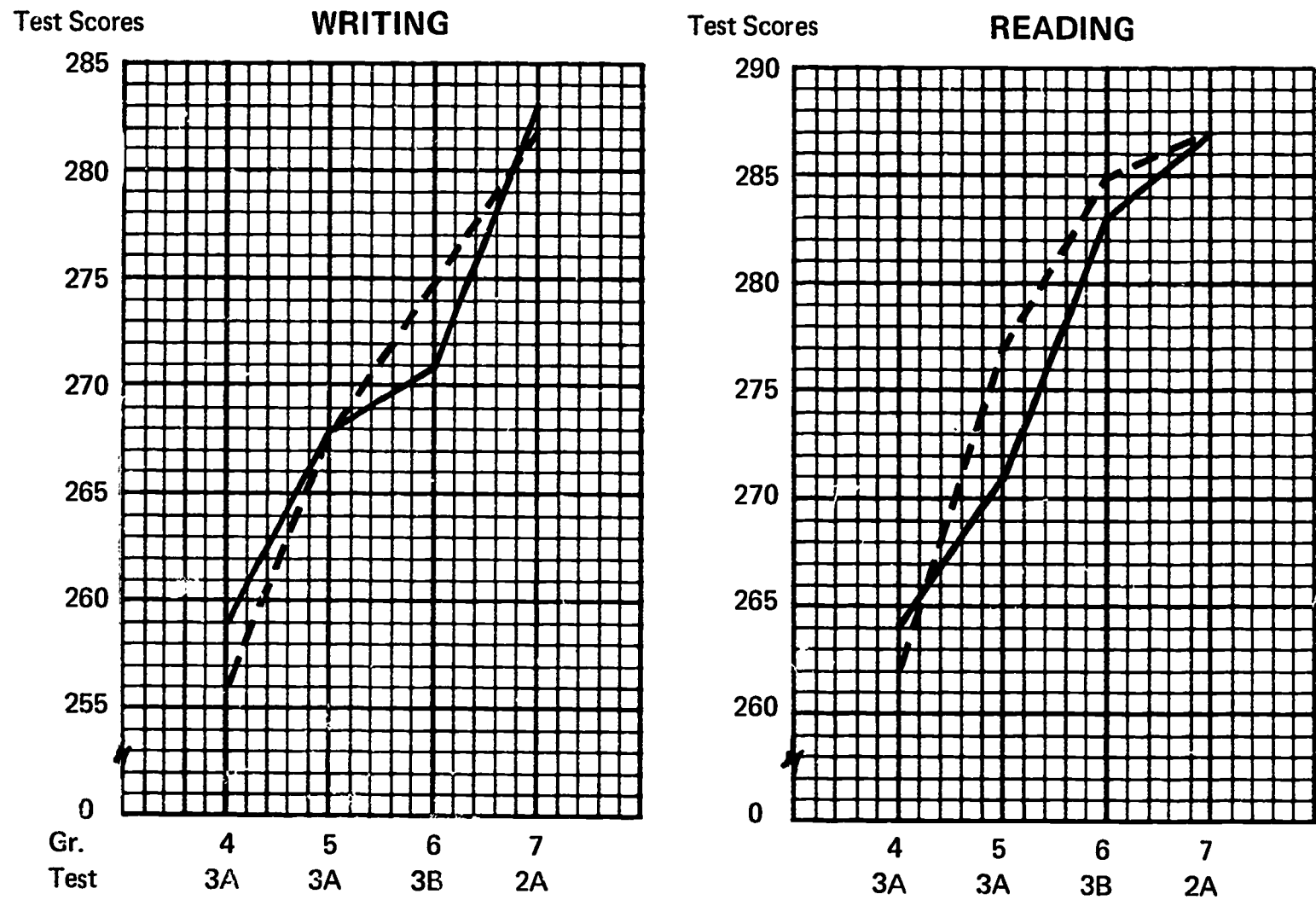


Figure V.12b

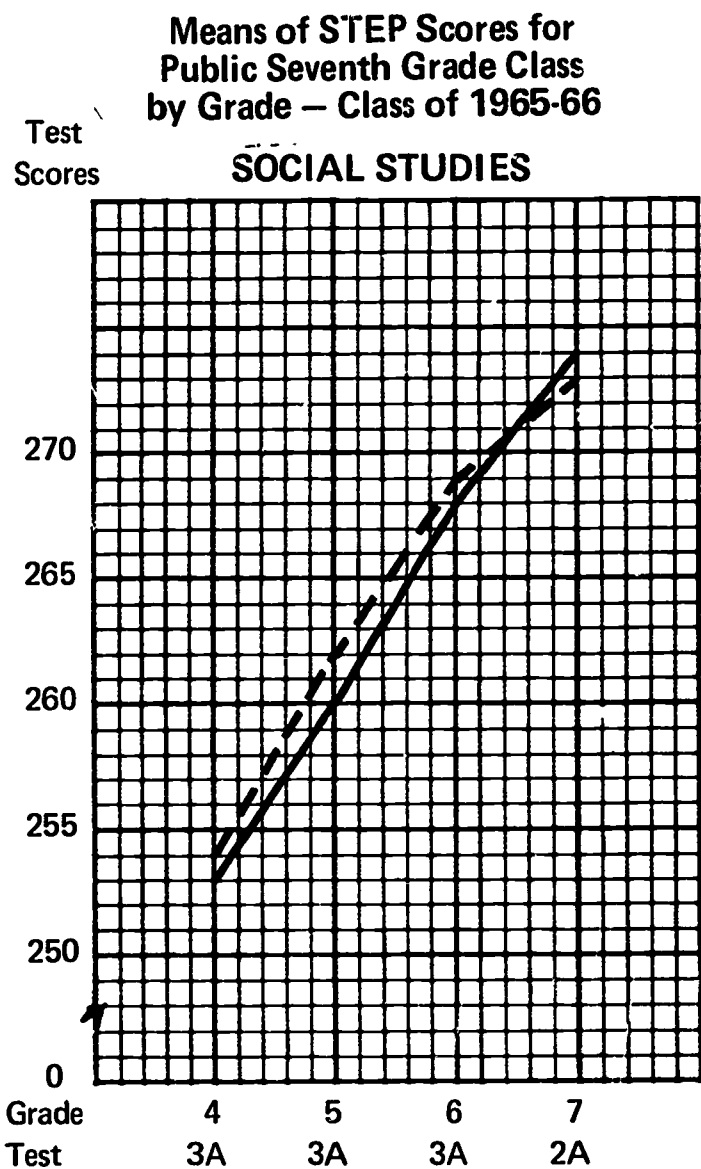


Figure V.13

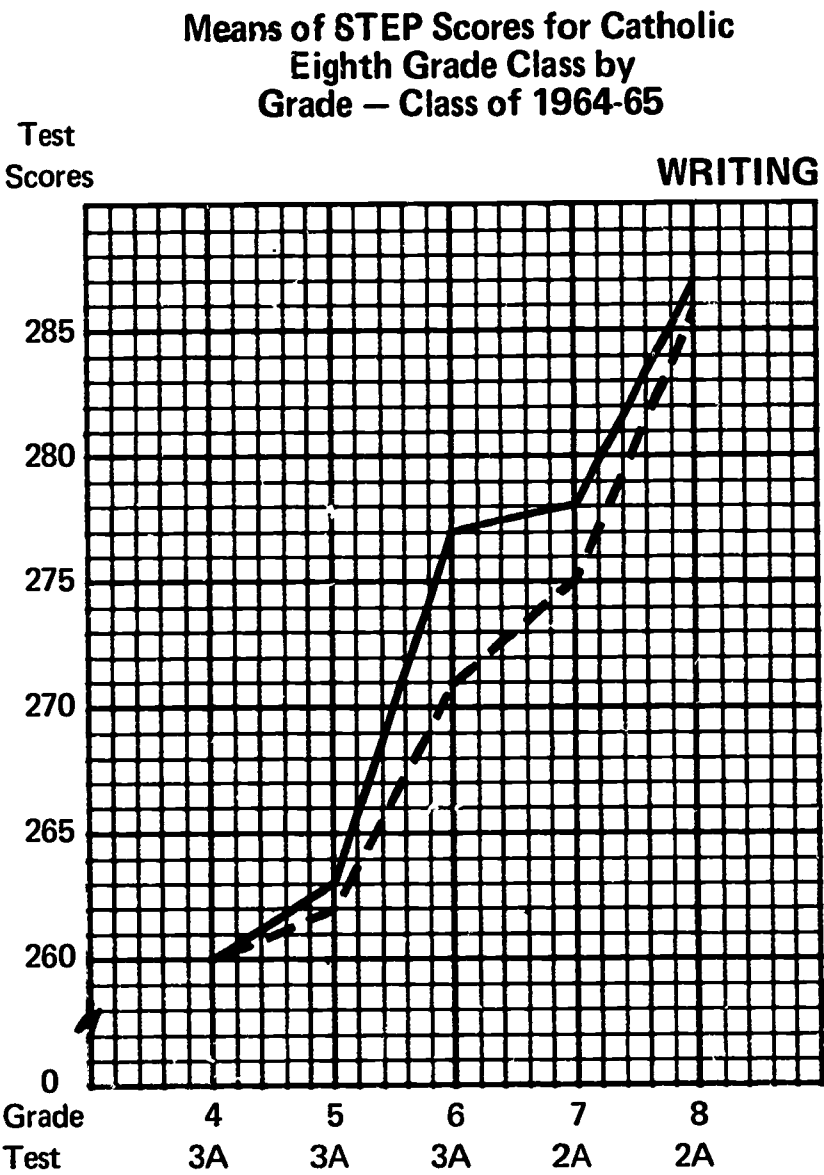
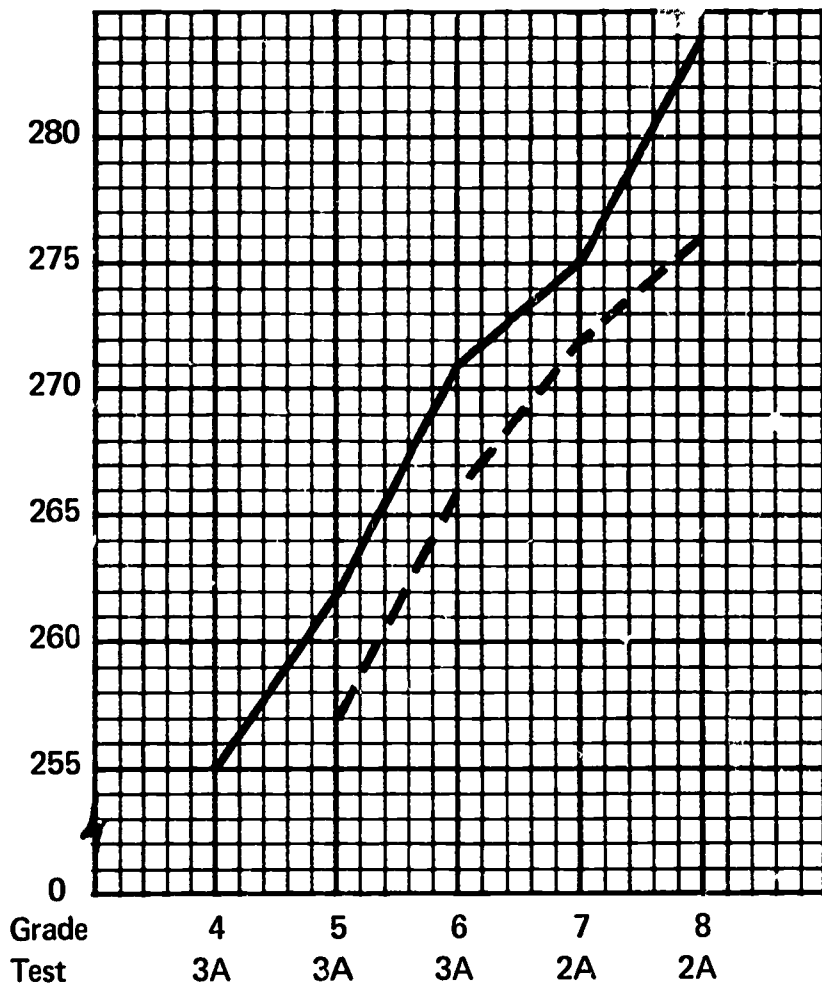
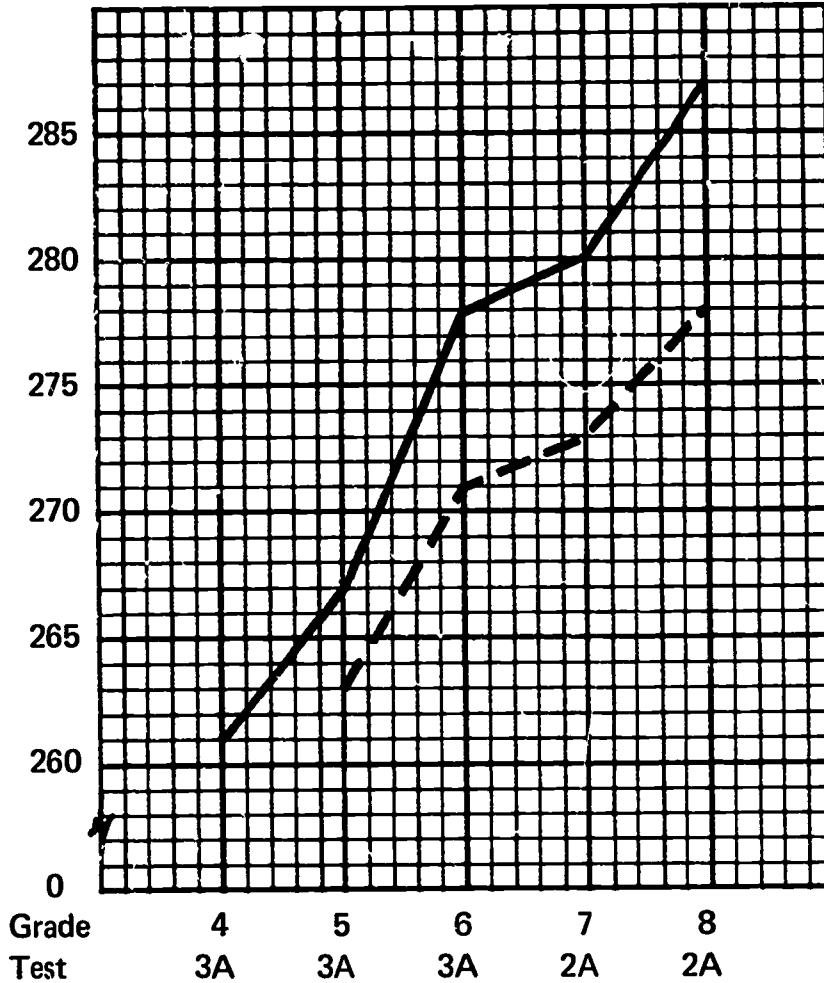


Figure V.13a **CATHOLIC EIGHTH GRADE CLASS OF 1964-65 MATH**



CATHOLIC EIGHTH GRADE CLASS OF 1964-65 SCIENCE



Program _____

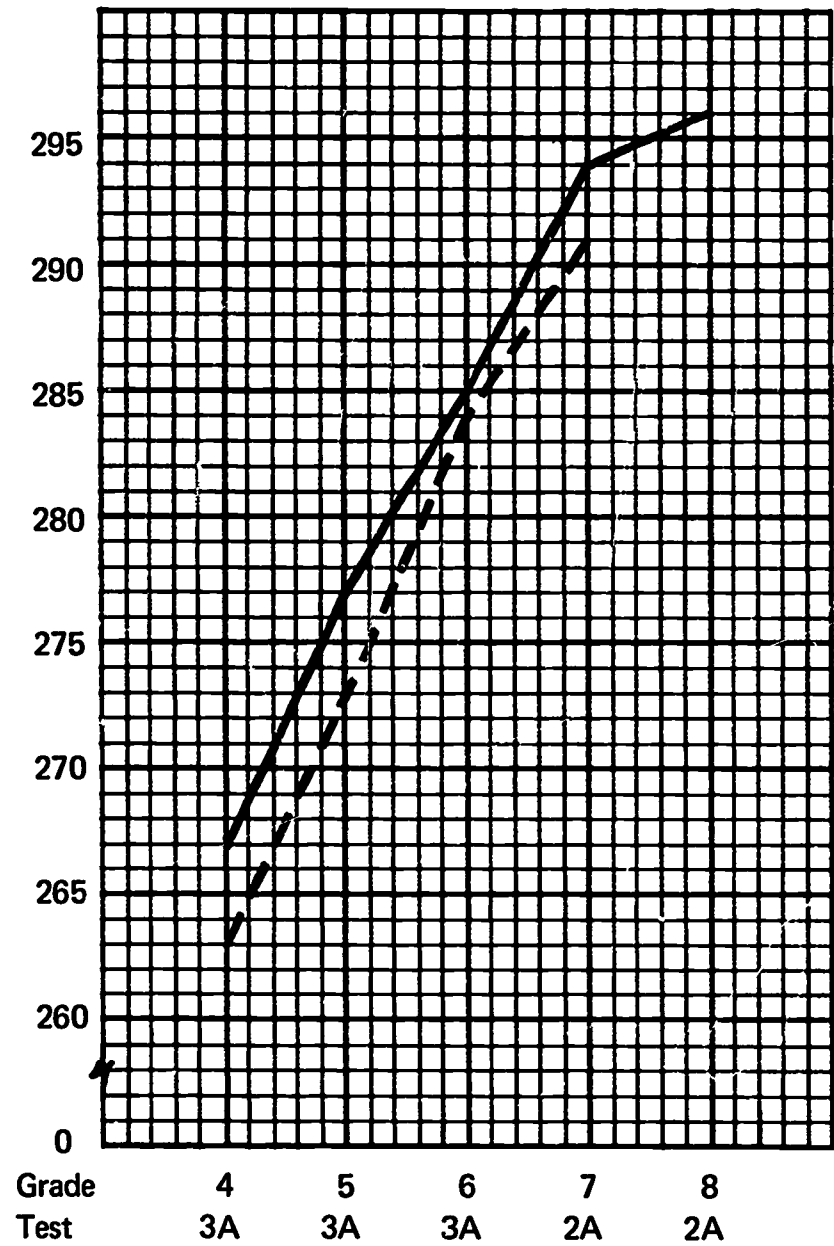
Comparison _____

Figure V.13b Means Of STEP Scores For Catholic Eighth Grade Class
By Grade
Class Of 1964 - 65
(con't)

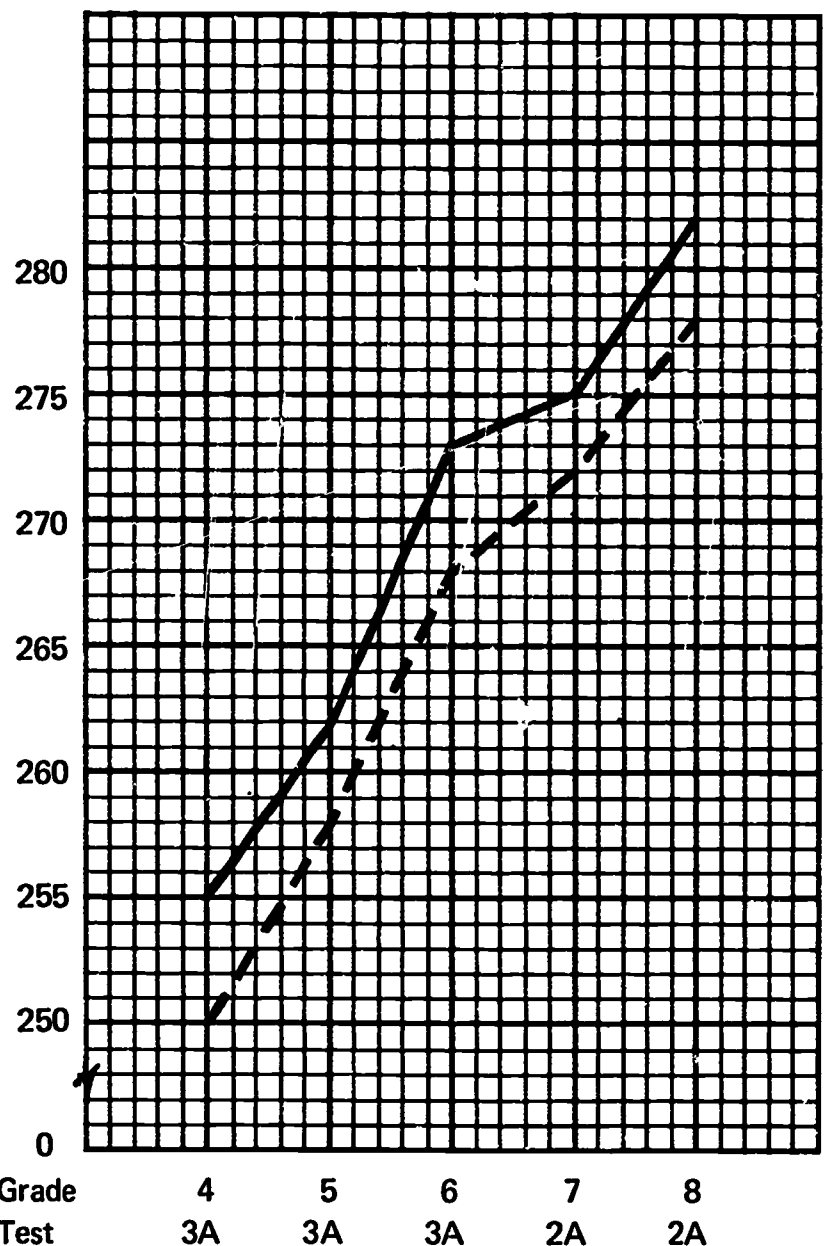
READING

SOCIAL STUDIES

Test
Scores



Test
Scores



Program _____

Comparison - - - - -

Figure V.14

Means of STEP Scores for Catholic Seventh Grade Class
by Grade — Class of 1965-66

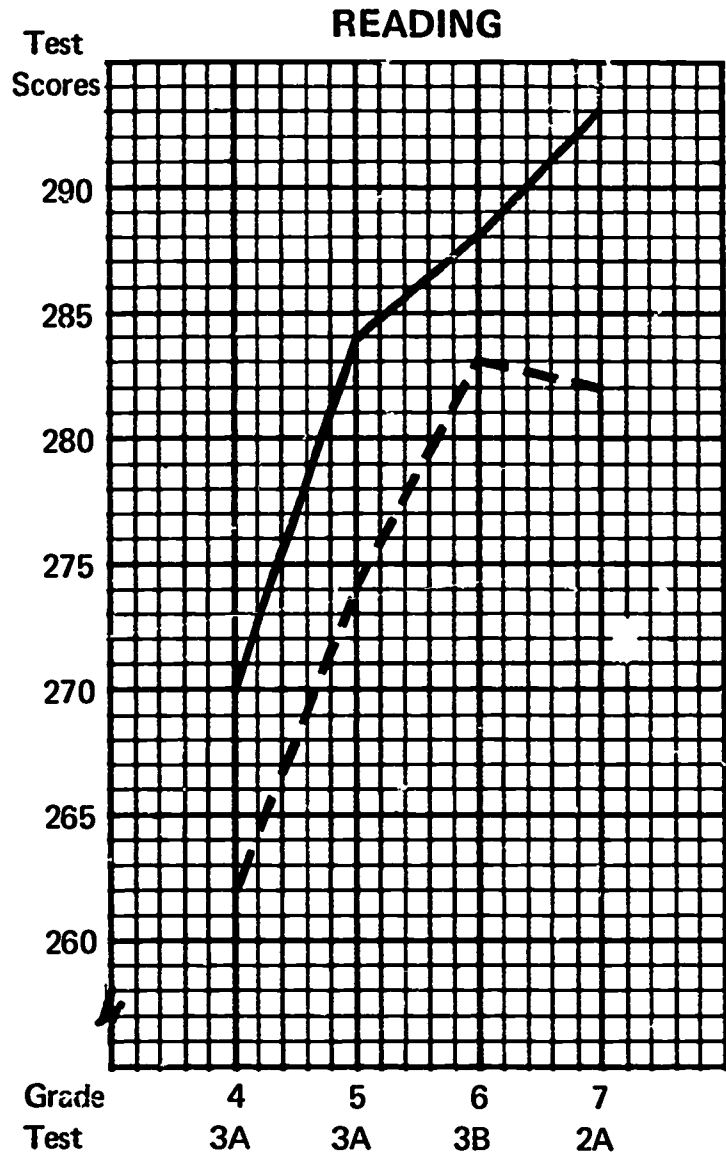
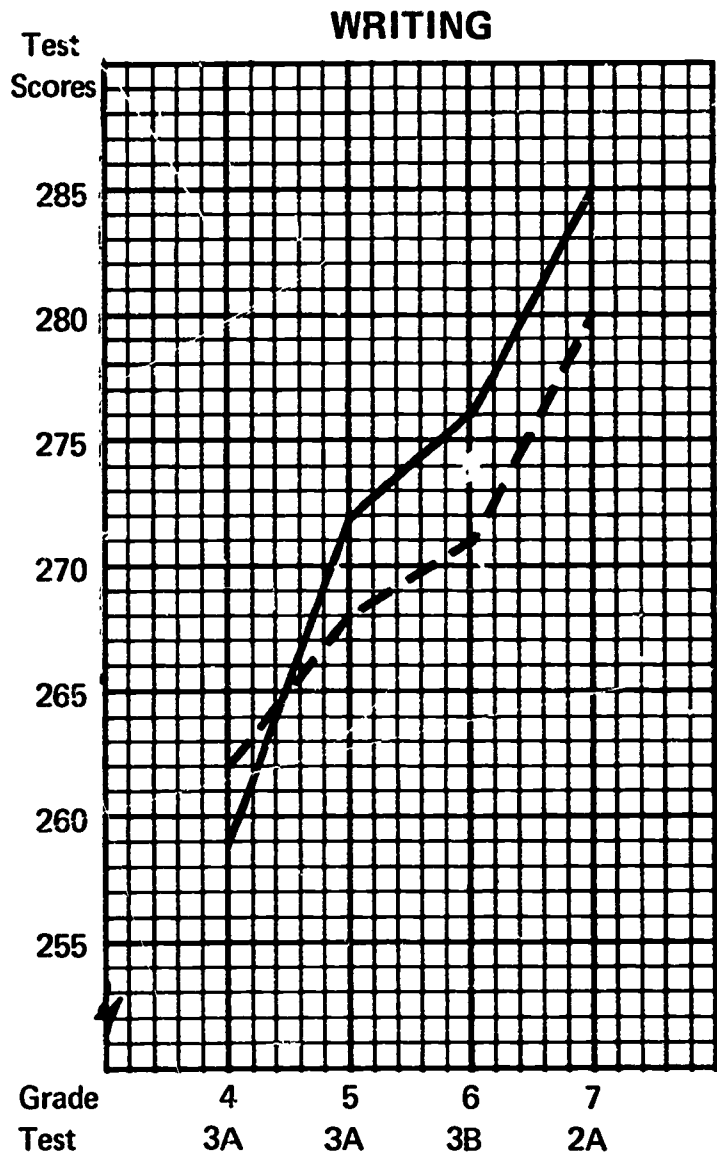
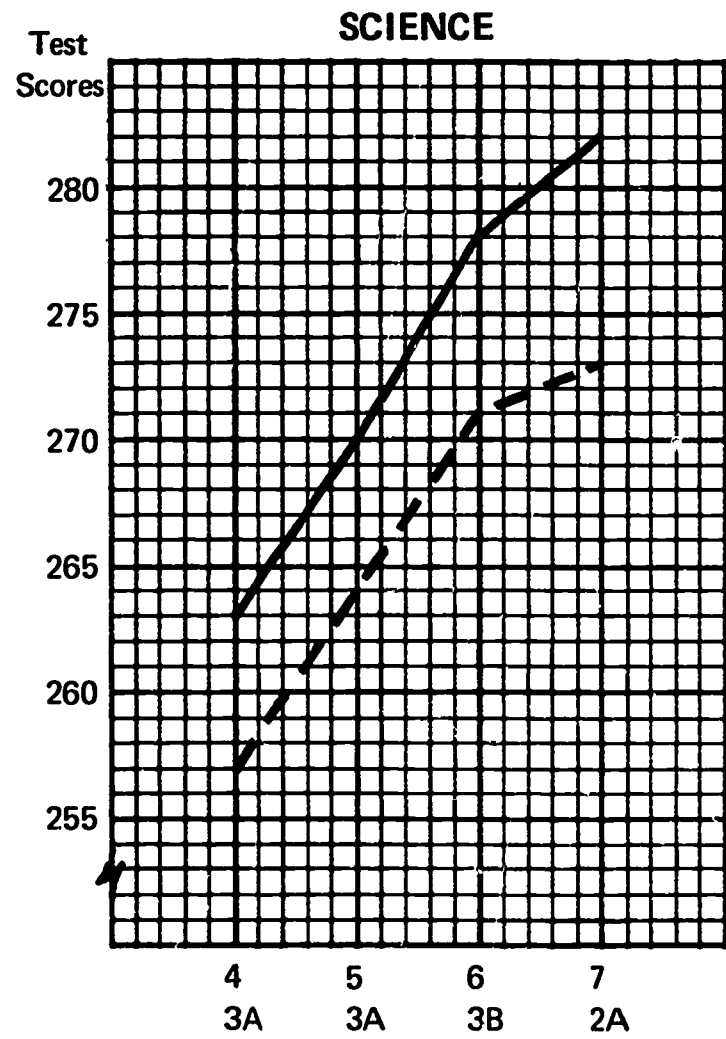
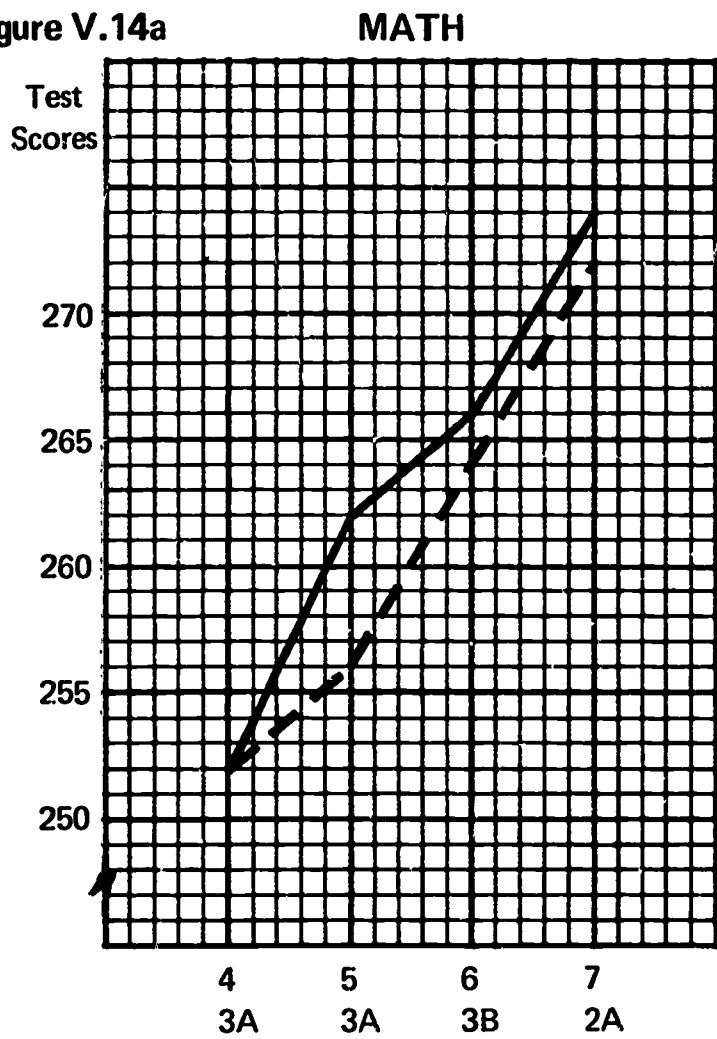


Figure V.14a



Program _____

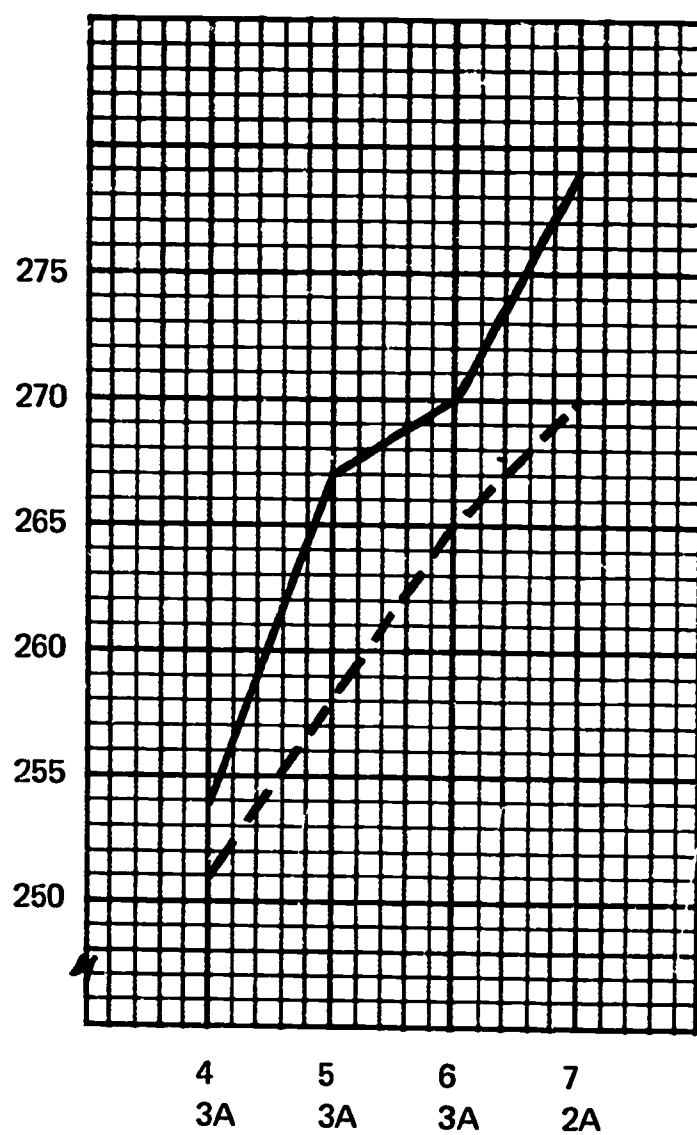
Comparison _____

Means of STEP Scores for Catholic Seventh Grade Class
by Grade
Class of 1965-66

(con't)

SOCIAL STUDIES

Test
Scores



Program Means _____

Comparison Means - - - - -

APPENDIX - C

TABLE VI.1 TEACHER RATING SCALE MEANS OF EIGHT AND SEVENTH
GRADE CLASSES IN 1967-68

When in:	<u>Seventh</u>				<u>Sixth</u>			
	<u>Public</u>		<u>Catholic</u>		<u>Public</u>		<u>Catholic</u>	
(1=Outstanding)	Exp.	Comp.	Exp.	Comp.	Exp.	Comp.	Exp.	Comp.
No. of ratings	78	62	33	22	46	44	31	45
Questions:								
Is able to gain cooperation of others to work toward a goal.	2.4	2.1	2.7	2.2	2.8	2.3	1.9	2.4
Shows ability to delegate responsibilities.	2.6	1.9	2.7	2.4	2.6	2.2	1.9	2.3
Encourages and leads the group to plan thoroughly before beginning a task.	2.6	2.1	2.5	2.4	2.5	2.6	1.8	2.4
In original and creative way applies abstract principles to practical matters.	2.4	2.0	2.7	2.1	2.5	2.5	2.1	2.4
Listens to and appreciates ideas and efforts of others.	2.3	2.2	2.6	1.8	2.3	2.4	1.6	2.4
Is often chosen by peers as one they like to have in their social group.	2.5	2.0	2.7	2.5	2.6	2.5	1.9	2.3
Shows a positive interest in wanting to understand and accept people.	2.5	2.2	2.6	2.4	2.4	2.1	1.8	2.5
Brings <u>relevant</u> material from outside of school to contribute to class discussions.	2.5	2.3	2.9	2.1	1.8	2.3	1.9	2.4

**TABLE VI.2 TEACHER INITIATED STATEMENTS FROM ANECDOTAL RECORDS
OF EIGHTH AND SEVENTH GRADE CLASSES 1967-68
IN "CREATIVITY"**

Items when in:	<u>Program</u>				<u>Comparison</u>			
	Public Seventh	Sixth	Catholic Seventh	Sixth	Public Seventh	Sixth	Catholic Seventh	Sixth
Animal Study	0	0	0	0	0	1	0	0
Art Work	1	12	17	7	1	12	4	2
Brought articles to illustrate project	0	0	0	0	0	13	0	0
Crafts: building, models, cooking, fashions, woodburning	0	5	3	2	0	2	0	0
Current Events: displays, discussions	1	0	0	0	2	1	4	1
Drama: dancing	0	9	0	3	1	0	2	1
Mature reasoning, organizing	4	4	1	0	0	0	0	1
Music	0	7	0	0	0	0	0	1
Reading, vocabulary	4	0	1	2	0	1	0	0
School subjects	0	2	0	0	0	6	1	0
Science projects	1	3	0	1	0	5	5	0
Writing	10	8	4	8	3	11	6	4

TABLE VI.3 TEACHER INITIATED STATEMENTS FROM ANECDOTAL RECORDS
OF EIGHTH AND SEVENTH GRADE CLASSES 1967-68
IN "INTELLECTUAL CURIOSITY"

Items	When in:	<u>Program</u>				<u>Comparison</u>			
		Public		Catholic		Public		Catholic	
		Seventh	Sixth	Seventh	Sixth	Seventh	Sixth	Seventh	Sixth
Interested in bird study, bats, insects, animals		0	2	2	1	0	1	0	0
Expert in rock study		0	0	0	1	0	0	0	0
Interested in linguistics		0	0	0	0	0	0	1	0
Interested in mythology		0	0	1	0	0	0	0	0
Interested in graphology		0	0	0	1	0	0	0	0
Interested in meteorology		0	0	0	1	0	0	0	0
Interested in hypnosis, ESP & Jules Verne		0	0	0	1	0	0	0	0
Interested in optical illusions		0	0	0	2	0	0	0	0
Makes model planes, medieval castles, rockets & capsules, designs future cars		0	0	0	0	0	3	0	0
Mechanically minded, makes his own TV, takes toaster fan, vac. cleaner, etc. apart to see how they work		1	0	0	4	0	0	0	0
Bought computer - learned how to use it - brought it to school to demonstrate		0	0	0	0	0	0	0	1
Keen insight - modern math		2	2	2	0	0	0	1	0
Interested in criminal law, lie detec.		0	0	1	2	0	0	0	0
Research formation of coal		0	0	0	1	0	0	0	0
Wishes to explore all areas		2	2	0	0	0	0	0	0

TABLE VI.3a TEACHER INITIATED STATEMENTS FROM ANECDOTAL RECORDS
OF EIGHTH AND SEVENTH GRADE CLASSES 1967-68
IN "INTELLECTUAL CURIOSITY"

Items	When in:	<u>Program</u>				<u>Comparison</u>			
		Public		Catholic		Public		Catholic	
		Seventh	Sixth	Seventh	Sixth	Seventh	Sixth	Seventh	Sixth
Avid reader - curious about new words		7	12	1	1	1	1	3	0
Attempts to prove "right" and "wrong" - questions reasoning and answers		1	1	1	2	2	0	0	0
Curious about scientific matter		3	5	7	12	1	4	0	1
Desire to excel - prepares lessons thoroughly - understands gram. concepts		3	1	0	1	1	0	0	0
Curious about historical backgrounds of people and situations		0	1	1	2	0	0	1	0
Investigates class projects thoroughly. Uses pictures and diagrams to explain report. Well read on ancient Egypt and palaces		3	3	7	4	1	3	0	3
Interested in anatomy and bone structure. Did research on Mongoloid children from psy. books. Int. in drugs, and in mental illness		0	0	1	3	0	1	0	0
Researched the structure of living cells into a prize-winning science project		0	0	0	0	0	0	1	0

TABLE VI.4
TEACHER INITIATED STATEMENTS FROM ANECDOTAL RECORDS
OF EIGHTH AND SEVENTH GRADE CLASSES 1967-68
IN "ANALYTICAL THINKING"

Items	When in:	<u>Program</u>				<u>Comparison</u>			
		Public		Catholic		Public		Catholic	
		Seventh	Sixth	Seventh	Sixth	Seventh	Sixth	Seventh	Sixth
Has good reasoning powers, applies rules and principles to practice		1	2	7	4	1	0	0	0
Good reasoning power, looks for "loop holes"		8	0	2	3	1	0	1	3
Excellent student of grammar; grammar requires anal. thinking		0	2	1	0	1	0	0	0
Analyses of word relationships in sentence structure		1	2	1	1	1	0	0	0
Thinks well in discussion		2	0	0	1	1	0	0	0
Excellent student of syntax		0	0	0	0	1	0	0	0
Good in solving and explaining math problems		4	2	1	4	0	7	0	0
Has scientific knowledge, applies principles to problems		0	3	11	0	0	2	0	0
Can discuss ideas on an adult level		1	2	0	0	0	0	0	0
Analyzes handwriting		0	0	0	1	0	0	0	0
Suggested method of cataloging articles of interest		0	0	1	0	0	0	0	0
Analyzes symbolic meaning in poetry		0	0	0	0	0	0	1	0
Follows form of government back to early Greece & Rome, questions how many things are <u>new</u> concepts		0	0	0	0	0	0	1	0

TABLE VI.5 TEACHER INITIATED STATEMENTS FROM ANECDOTAL RECORDS
OF EIGHTH AND SEVENTH GRADE CLASSES IN 1967-68
ON "DEVELOPMENT OF INTERESTS"

Items	When in:	Program				Comparison			
		Public		Catholic		Public		Catholic	
		Seventh	Sixth	Seventh	Sixth	Seventh	Sixth	Seventh	Sixth
Animals - pets		0	3	3	0	0	0	1	0
Archaeology - astrology		0	0	1	2	0	1	0	0
Architecture		0	0	1	0	0	0	0	0
Art		3	6	4	2	0	0	0	1
Broad knowledge of literature		0	0	0	0	1	0	0	0
Collections - stamps, etc.		0	6	7	7	0	1	0	0
Conservation		0	0	1	0	0	0	0	0
Crafts - sewing, int. deco., home designing		0	3	2	2	0	1	0	0
Current Events - politics, debating		0	0	2	2	1	0	0	0
Drama		0	5	0	0	0	0	0	0
Electronics - chemistry		0	0	3	2	0	0	0	0
Fashions - sketches on display		2	0	1	0	0	0	1	0
Games, T.V.		2	3	0	0	0	0	0	0
Greek mythology		0	0	0	0	0	1	0	0
Hobbies, whittling, etc.		0	1	4	0	0	0	0	0
Int. in all subjects		2	1	0	0	0	0	0	0
Model trains, cars		0	0	3	1	0	1	1	0
Inventions		0	0	0	1*	0	0	0	0
School subjects		4	2	7	3	0	1	0	1
Music		2	8	0	1	3	0	0	0
Explores nature, rocks, birds		0	0	1	0	0	2	0	0
Reading		6	11	3	5	0	1	0	0
Opposite sex		1	2	0	0	0	0	0	0
Social activities		2	1	0	0	0	0	0	0
Sports		3	26	11	2	1	2	2	0
Travel		0	1	1	0	0	0	0	0

* Has volumes of blue prints drawn up for possible new inventions.

TABLE VI.6 TEACHER INITIATED STATEMENTS FROM ANECDOTAL RECORDS
OF EIGHTH AND SEVENTH GRADE CLASSES IN 1967-68
ON "SELF-DIRECTION IN LEARNING"

Items	When in:	<u>Program</u>				<u>Comparison</u>			
		Public		Catholic		Public		Catholic	
		Seventh	Sixth	Seventh	Sixth	Seventh	Sixth	Seventh	Sixth
Excellent research in projects, diagrams		0	0	1	3	0	3	0	1
Excellent vocabulary		0	0	1	1	0	0	0	0
Good and near organizer when interests are high		1	0	2	1	0	0	0	0
Great deal reading and thinking on other subjects		1	0	1	1	0	0	0	0
Interested in science		0	0	2	6	0	0	1	0
Likes to work with group, likes challenge		1	0	0	3	0	0	0	0
Not eager to work, needs push		7	6	4	1	0	0	0	0
Organized, work always on time		0	16	0	2	0	0	0	0
Practices and studies to improve		0	2	0	0	0	0	0	0
Rarely asks for help		9	0	7	1	0	0	0	0
Reads extensively news, mag., and current affairs		0	1	0	1	1	0	1	2
Studies ahead, gets assignments		0	2	1	1	1	1	0	0
Takes pride in their work		0	3	0	0	0	0	0	0
Very self-directive, independent study		2	2	1	1	2	1	0	0
Volunteers for special projects		1	2	4	5	0	2	1	0
Wrote and narrated plays		0	0	0	1	0	0	0	1

TABLE VI.7 TEACHER INITIATED STATEMENTS FROM ANECDOTAL RECORDS
OF EIGHTH AND SEVENTH GRADE CLASSES IN 1967-68
ON "SOCIAL CONCERN"

Items	When in:	<u>Program</u>				<u>Comparison</u>			
		Public		Catholic		Public		Catholic	
		Seventh	Sixth	Seventh	Sixth	Seventh	Sixth	Seventh	Sixth
Associates with those of similar interests		3	5	0	0	0	0	0	0
Aware of social problems		0	5	1	28	0	0	0	0
Chooses friends of same economic - intellectual		1	0	0	0	0	0	0	0
Concern about what peers think, desire to lead		7	5	3	0	0	0	0	0
Critical of others		0	1	2	0	0	0	0	0
Does not participate in school activities		1	0	2	0	0	0	0	0
Doesn't like certain people		0	4	0	1	0	0	0	0
Emotional problems		0	1	3	0	0	0	0	0
Has many friends, kind		8	9	10	2	0	0	0	0
Has new friends		5	4	1	0	0	0	0	0
Immature and lazy		2	0	5	0	0	0	0	0
Mature, polite		1	5	1	1	0	0	0	0
Not a leader		0	2	0	0	0	0	0	0
Not concerned about appearance or others' feelings		0	2	0	0	0	0	0	0
Prefers opposite sex		0	2	0	0	0	0	0	0
Prefers to work alone		1	2	7	0	0	0	0	0
Social, disturbs others		1	4	0	0	0	0	0	0
Sports-minded		0	1	1	0	0	0	0	0
Uncooperative, hates school boring		1	0	2	0	0	0	0	0
Works well with people, makes friends easily		8	8	5	5	0	0	0	0

APPENDIX - D

144/145

TABLE VII.1 SEVENTH GRADE PUPILS' FAVORITE RECREATIONS
1967-68

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Seven	Four	Seven	Four	Seven	Four	Seven
1		2	3	4	5	6	7	8	9
Recreations									
Don't know		3%	0%	3%	5%	0%	3%	0%	3%
Reading		2	0	8	3	3	3	3	3
Active play - group		64	72	54	33	47	44	58	47
Active play - indiv.		26	26	28	51	38	44	23	35
T.V., records		0	0	3	0	0	0	6	6
Hobbies		5	2	2	5	6	0	10	6
Very little, nothing		0	0	0	3	0	3	0	0
Other		0	0	2	0	6	3	0	0
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.2 SIXTH GRADE PUPILS' FAVORITE RECREATION
1967-68

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Seven	Four	Seven	Four	Seven	Four	Seven
1		2	3	4	5	6	7	8	9
Recreations									
Don't know		4%	6%	0%	0%	0%	3%	0%	0%
Reading		6	2	0	0	3	3	3	6
Active play - group		43	49	45	45	31	41	41	47
Active play - indiv.		26	41	42	47	47	47	47	38
T.V., records		6	0	2	2	3	0	0	0
Hobbies		11	2	9	6	10	3	9	9
Very little, nothing		0	0	0	0	0	3	0	0
Other		4	0	2	0	6	0	0	0
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.3

LEISURE ACTIVITIES OF PUPILS

Class of 1964-65

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Seven	Four	Seven	Four	Seven	Four	Seven
1		2	3	4	5	6	7	8	9
Activities									
None		0%	0%	5%	0%	0%	0%	0%	0%
Read		28	41	26	43	22	44	22	41
Active play (group)		21	15	28	10	22	25	39	22
Active play (indiv.)		15	23	11	13	22	9	16	3
T.V., records		10	13	10	8	16	3	10	19
Hobbies		18	5	10	18	15	9	10	9
Little, nothing.		3	0	0	5	3	3	0	6
Other		5	3	10	3	0	7	3	0
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.4

LEISURE ACTIVITIES OF PUPILS

Class of 1965-66

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Six	Four	Six	Four	Six	Four	Six
1		2	3	4	5	6	7	8	9
Activities									
None		2%	0%	0%	0%	0%	3%	0%	0%
Read		53	42	34	47	38	41	28	22
Active play (group)		15	11	28	19	19	9	25	16
Active play (indiv.)		2	17	6	15	12	19	9	13
T.V., records		11	15	11	6	16	22	13	12
Hobbies		11	15	17	13	6	6	19	31
Little, nothing		4	0	0	0	0	0	6	6
Other		2	0	4	0	9	0	0	0
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.5 **SEVENTH GRADE PUPILS' FAVORITE T.V. PROGRAMS**
Class of 1964-65

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Seven	Four	Seven	Four	Seven	Four	Seven
1		2	3	4	5	6	7	8	9
Favorite programs									
None		26%	5%	3%	3%	9%	13%	6%	3%
Comedy, variety		31	51	8	8	16	25	26	34
Cartoons		10	0	26	49	19	0	23	0
Science fiction		2	26	33	31	6	28	3	22
Adventure		15	18	5	0	31	28	19	35
Movies, serials		13	0	5	0	10	3	7	3
Mysteries		0	0	10	7	3	3	0	0
Sports		0	0	0	0	3	0	3	0
Education-scientific		0	0	10	2	0	0	3	3
Educational-animal		3	0	0	0	3	0	10	0
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.6 **SIXTH GRADE PUPILS' FAVORITE T.V. PROGRAMS**
Class of 1965-66

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Six	Four	Six	Four	Six	Four	Six
1		2	3	4	5	6	7	8	9
Favorite programs									
None		8%	6%	11%	2%	6%	6%	3%	0%
Comedy, variety		30	51	34	47	25	25	38	35
Cartoons		2	0	6	0	6	0	3	0
Science fiction		11	13	11	11	13	22	16	6
Adventure		43	30	26	36	41	25	34	47
Movies, serials		6	0	6	0	3	13	0	3
Mysteries		0	0	2	0	0	3	0	0
Sports		0	0	0	4	6	6	6	3
Educational-sci.		0	0	2	0	0	0	0	3
Educational-animal		0	0	2	0	0	0	0	3
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.7 PARTS OF NEWSPAPERS READ BY SEVENTH GRADE PUPILS
1967-68

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Seven	Four	Seven	Four	Seven	Four	Seven
1		2	3	4	5	6	7	8	9
Newspaper sections									
None		5%	0%	2%	0%	3%	0%	3%	0%
Comics, children's		51	36	36	28	44	22	29	25
Sports		13	21	31	31	22	28	32	38
Front page, headline		26	26	15	26	13	44	16	28
Sensational stories		2	0	0	2	6	3	3	0
Ads, puzzles, births		3	2	5	5	3	0	7	6
Weather		0	0	3	2	6	0	0	0
Editorials		0	2	3	0	3	0	0	0
Women's page		0	8	5	3	0	3	10	3
All/other		0	5	0	3	0	0	0	0
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.8 PARTS OF NEWSPAPERS READ BY SIXTH GRADE PUPILS
1967-68

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Six	Four	Six	Four	Six	Four	Six
1		2	3	4	5	6	7	8	9
Newspaper sections									
None		0%	2%	4%	0%	0%	0%	3%	0%
Comic, children's		47	37	40	45	66	38	38	28
Sports		19	21	7	19	22	25	19	25
Front page, headline		26	30	32	24	6	31	25	25
Sensational stories		2	0	4	0	0	0	0	0
Ads, puzzles, births		2	2	7	4	6	0	9	9
Weather		0	0	2	2	0	0	0	3
Editorials		2	2	0	2	0	0	3	0
Women's page		0	2	4	4	0	3	3	7
All/other		2	4	0	0	0	3	0	3
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.9

SEVENTH GRADE PUPILS' FAVORITE MAGAZINES
1967-68

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Seven	Four	Seven	Four	Seven	Four	Seven
1		2	3	4	5	6	7	8	9
Magazines									
None		5%	3%	16%	5%	13%	9%	7%	6%
Children's		28	5	15	7	22	13	42	25
Comic books		10	8	0	2	22	9	10	10
Adult general interest		33	33	46	36	31	44	32	22
Women's		13	0	18	3	3	0	0	6
Men's		8	18	5	21	9	13	6	19
Catalogs		3	0	0	0	0	0	0	0
Other, teen		0	33	0	26	0	12	3	12
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.10

SIXTH GRADE PUPILS' FAVORITE MAGAZINES
1967-68

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Six	Four	Six	Four	Six	Four	Six
1		2	3	4	5	6	7	8	9
Magazines									
None		15%	4%	6%	0%	6%	3%	6%	3%
Children's		36	15	30	32	44	25	25	28
Comic books		2	4	6	0	9	6	6	9
Adult general interest		40	45	34	34	19	28	38	38
Women's		5	2	11	0	13	3	9	0
Men's		2	6	9	8	6	13	13	13
Catalogs		0	0	0	0	0	0	0	0
Other, teen		0	24	4	26	3	22	3	9
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.11
BOOKS READ BY SEVENTH GRADE PUPILS
1967-68

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Seven	Four	Seven	Four	Seven	Four	Seven
1		2	3	4	5	6	7	8	9
Best books read									
None, don't know		2%	0%	0%	0%	3%	6%	0%	0%
Hero, folk, mythology		0	7	10	2	0	0	6	3
Animal		3	0	5	5	3	6	13	0
Family, school, career		5	7	13	13	3	3	0	9
Biography, autobiography		10	3	18	15	16	10	13	3
Other times, places		18	18	13	8	19	3	13	28
World today		0	0	0	2	0	0	3	0
Adventure		15	39	5	31	12	22	3	22
Mystery		18	13	13	8	16	16	16	10
Fun and nonsense		13	0	5	0	0	3	10	0
Sports, hobbies		3	3	5	3	9	16	7	22
Science, science fiction		13	10	10	13	19	15	16	3
Poetry and plays		0	0	3	0	0	0	0	0
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.12
BOOKS READ BY SIXTH GRADE PUPILS
1967-68

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Six	Four	Six	Four	Six	Four	Six
1		2	3	4	5	6	7	8	9
Best books read									
None, don't know		2%	0%	0%	2%	0%	0%	3%	0%
Hero, folk, mythology		4	8	11	4	9	6	6	0
Animal		13	4	11	13	19	6	3	6
Family, school, car		9	15	13	28	19	16	3	13
Biography, autobiography		17	2	10	9	6	0	16	6
Other times, places		4	15	4	11	10	3	19	22
World today		0	2	0	0	0	0	0	0
Adventure		19	9	22	19	0	19	16	22
Mystery		13	26	14	6	25	25	28	19
Fun and nonsense		2	0	2	2	6	3	0	0
Sports, hobbies		6	6	2	6	0	6	3	9
Science, science fiction		9	11	11	0	6	13	3	3
Poetry and plays		2	2	0	0	0	3	0	0
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.13 SEVENTH GRADE PUPILS' OUTSIDE SCHOOL ACTIVITIES
1967-68

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program Four	Seven	Comparison Four	Seven	Program Four	Seven	Comparison Four	Seven
1		2	3	4	5	6	7	8	9
Activities									
None		18%	31%	13%	23%	41%	28%	16%	28%
Active sports-group		2	10	8	15	6	25	16	25
Active sports-indiv.		8	3	3	8	6	19	0	3
Clubs, organizations		36	33	56	44	28	16	55	31
Music, dancing		36	23	20	10	19	9	13	10
Other		0	0	0	0	0	3	0	3
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.14 SIXTH GRADE PUPILS' OUTSIDE SCHOOL ACTIVITIES
1967-68

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program Four	Six	Comparison Four	Six	Program Four	Six	Comparison Four	Six
1		2	3	4	5	6	7	8	9
Activities									
None		15%	23%	9%	21%	25%	28%	9%	25%
Active sports-group		6	4	6	4	3	6	25	16
Active sports-indiv.		4	4	13	4	13	13	6	6
Clubs, organizations		45	41	30	60	44	28	38	34
Music, dancing		24	26	36	9	12	25	19	16
Other		6	2	6	2	3	0	3	3
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.15 SEVENTH GRADE PUPILS' ACTIVITIES IN SPORTS
1967-68

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Seven	Four	Seven	Four	Seven	Four	Seven
1		2	3	4	5	6	7	8	9
Sports									
None		0%	0%	0%	0%	3%	6%	0%	0%
Active-group		49	87	64	72	38	78	68	81
Active-indiv.		51	13	36	28	59	16	32	19
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.16 SIXTH GRADE PUPILS' ACTIVITIES IN SPORTS
1967-68

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Six	Four	Six	Four	Six	Four	Six
1		2	3	4	5	6	7	8	9
Sports									
None		4%	2%	2%	2%	0%	6%	9%	3%
Active - group		75	92	51	83	78	59	63	78
Active - indiv.		21	6	47	15	22	35	28	19
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.17

SEVENTH GRADE PUPILS' HOBBIES
1967-68

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Seven	Four	Seven	Four	Seven	Four	Seven
1		2	3	4	5	6	7	8	9
Hobbies									
None, don't know		10%	2%	0%	2%	9%	12%	6%	9%
Collections		41	56	41	54	34	38	29	41
Reading		5	5	13	3	13	0	10	6
Art work, crafts		28	31	33	33	38	28	39	41
Caring for pet		5	3	0	0	0	0	0	0
Sports		8	3	5	5	3	22	13	0
Other		3	0	8	3	3	0	3	3
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.18

SIXTH GRADE PUPILS' HOBBIES
1967-68

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Six	Four	Six	Four	Six	Four	Six
1		2	3	4	5	6	7	8	9
Hobbies									
None, don't know		9%	6%	4%	0%	10%	0%	6%	0%
Collections		47	43	57	64	47	41	47	35
Reading		4	8	9	2	6	9	3	6
Art work, crafts		34	26	26	30	31	38	38	50
Caring for pets		0	2	0	2	0	0	0	3
Sports		4	11	0	2	6	6	6	3
Other		2	4	4	0	0	6	0	3
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.19 SEVENTH GRADE PUPILS' EDUCATIONAL AMBITIONS 1967-68

Item	Grade:	Percent of responses							
		Public				Catholic			
		Program Four	Seven	Comparison Four	Seven	Program Four	Seven	Comparison Four	Seven
1		2	3	4	5	6	7	8	9
Educational ambitions									
Post College		5%	18%	33%	26%	13%	3%	26%	6%
College		90	82	62	69	81	94	74	84
High, vocational		5	0	5	3	6	3	0	10
Undecided		0	0	0	2	0	0	0	0
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.20 SIXTH GRADE PUPILS' EDUCATIONAL AMBITIONS 1967-68

Item	Grade:	Percent of responses							
		Public				Catholic			
		Program Four	Six	Comparison Four	Six	Program Four	Six	Comparison Four	Six
1		2	3	4	5	6	7	8	9
Educational ambitions									
Post College		36%	17%	0%	13%	28%	16%	13%	19%
College		64	81	89	83	63	81	72	81
High, vocational		0	2	4	2	9	3	9	0
Undecided		0	0	7	2	0	0	6	0
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.21

SEVENTH GRADE PUPILS' VOCATIONAL AMBITIONS
1967-68

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Seven	Four	Seven	Four	Seven	Four	Seven
1		2	3	4	5	6	7	8	9
Vocations									
None, undecided		n.s.*	21%	n.s.*	10%	n.s.*	22%	n.s.*	9%
Profession		n.s.	51	n.s.	69	n.s.	34	n.s.	50
Business		n.s.	13	n.s.	10	n.s.	6	n.s.	19
Religious		n.s.	0	n.s.	0	n.s.	13	n.s.	3
Military		n.s.	2	n.s.	0	n.s.	0	n.s.	0
Housewife		n.s.	0	n.s.	0	n.s.	3	n.s.	10
Athlete		n.s.	3	n.s.	3	n.s.	9	n.s.	6
Financial success		n.s.	0	n.s.	0	n.s.	0	n.s.	0
Be educated		n.s.	0	n.s.	0	n.s.	0	n.s.	0
Science, space		n.s.	10	n.s.	8	n.s.	13	n.s.	3
Other		n.s.	0	n.s.	0	n.s.	0	n.s.	0
Total			100%		100%		100%		100%

* This question was not included in the fourth grade questionnaire.

TABLE VII.22

SIXTH GRADE PUPILS' VOCATIONAL AMBITIONS
1967-68

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Six	Four	Six	Four	Six	Four	Six
1		2	3	4	5	6	7	8	9
Vocations									
None, undecided		4%	9%	24%	17%	6%	10%	22%	6%
Profession		62	68	49	57	44	66	31	57
Business		9	6	4	9	9	9	6	16
Religious		0	0	2	2	13	6	28	6
Military		4	2	0	0	0	0	0	0
Housewife		2	4	0	0	0	0	0	3
Athlete		4	4	6	4	9	6	3	9
Financial success		0	0	0	0	0	0	0	0
Be educated		0	0	0	0	0	0	0	0
Science, space		15	7	15	11	19	3	10	3
Other		0	0	0	0	0	0	0	0
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.23

VOCATIONAL CHOICES OF PARENTS
FOR SEVENTH GRADE PUPILS
1967-68

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Seven	Four	Seven	Four	Seven	Four	Seven
1		2	3	4	5	6	7	8	9
Vocations									
None		69%	70%	64%	73%	78%	94%	52%	78%
Profession		25	16	32	18	6	0	16	13
Business		3	2	0	3	3	0	7	3
Religious		0	2	0	0	10	6	16	6
Military		0	2	0	0	0	0	3	0
Housewife		0	0	4	0	0	0	3	0
Athlete		1	0	0	0	3	0	3	0
Financial success		1	3	0	0	0	0	0	0
Be educated		1	5	0	5	0	0	0	0
Science, space		0	0	0	1	0	0	0	0
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.24

VOCATIONAL CHOICES OF PARENTS
FOR SIXTH GRADE PUPILS
1967-68

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Six	Four	Six	Four	Six	Four	Six
1		2	3	4	5	6	7	8	9
Vocations									
None		59%	89%	81%	66%	59%	81%	50%	56%
Profession		33	9	16	30	19	13	16	22
Business		6	0	2	2	3	0	6	3
Religious		0	0	0	0	16	3	13	16
Military		0	0	0	0	0	0	0	0
Housewife		0	2	1	0	3	3	3	0
Athlete		1	0	0	2	0	0	3	0
Financial success		1	0	0	0	0	0	0	0
Be educated		0	0	0	0	0	0	0	3
Science, space		0	0	0	0	0	0	9	0
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.25 OPINIONS FROM ESSAYS "HOW I HAVE CHANGED"
BY PUBLIC PROGRAM PUPILS

Item	Class of 1964-65			Class of 1965-66		
	Sup.	V.T.	T.	Sup.	V.T.	T.
+ 1	2	3	4	5	6	7
Activities outside of school	2	0	2	0	0	0
Being with friends	1	3	1	0	1	9
Better attitude toward:						
Teachers	1	0	2	2	3	3
Parents	0	0	2	0	0	0
Studies	3	5	2	0	14	8
School	2	0	0	0	1	3
Better teachers, spec. subjects	0	0	0	5	0	0
Challenge, think more, new ideas	0	0	0	1	2	0
Conscious of worldly affairs	0	1	1	1	0	0
Discovered various goals to serve others	1	0	1	0	0	0
Don't like school, teachers	0	0	0	4	2	3
Enjoyed the gifted program	0	0	0	0	5	2
Gained confidence	1	1	1	1	0	2
Greater curiosity	0	0	1	3	0	0
Have more hobbies	1	0	0	0	0	0
Improved socially	0	0	1	1	0	2
Meeting new and interesting people	2	5	0	6	8	2
More interesting work	2	0	0	1	0	0
More mature	7	2	6	2	1	0
More intelligent, better memory	0	2	0	1	1	0
More knowledgeable in all subjects	0	2	0	0	0	0
Not bored, things always happening	0	0	0	1	3	0
Outlook changed	3	0	2	0	0	1
Personality change	3	0	1	0	1	3
Program has helped me learn faster and more	2	0	0	0	0	1
Likes sports	9	0	2	0	3	6
Study more	1	1	0	1	0	0
Too much homework	3	0	0	0	0	0
Try harder to get better grades	0	1	1	1	2	2

Sup. — Superior (I.Q. of 140 and above)

V.T. — Very Talented (I.Q. of 130 to 140)

T. — Talented (I.Q. of 129 and below)

TABLE VII.26 OPINIONS FROM ESSAY "HOW I HAVE CHANGED"
BY CATHOLIC PROGRAM PUPILS

Item	Class of 1964-65			Class of 1965-66		
	Sup.	V.T.	T.	Sup.	V.T.	T.
1	2	3	4	5	6	7
Able to understand and cope with people better	0	1	0	0	0	0
Attitudes changed toward people, school	0	2	0	5	4	0
Better teachers, gives more attention	0	2	0	5	11	2
Changed outlook	0	1	0	3	3	0
Do more experiments, research	0	1	0	0	1	0
Enjoys going at my own pace	0	1	0	0	0	0
Enjoy's school, before it was too easy	0	5	0	0	1	0
Field trips as interesting, teach in a different way	1	2	0	0	2	3
Friends helped me to change greatly	0	1	0	1	0	0
Gained more knowledge	0	0	0	0	4	0
Grades improved, vocabulary and other subjects	0	1	0	1	11	0
Greater opportunity, better education	4	0	0	1	1	0
Ignored by my old friends	0	4	0	0	0	0
Learned how to concentrate, manners	0	2	0	0	0	0
Like program: work is harder more challenging	2	0	0	2	5	0
Like subjects, more meaning	2	14	0	1	0	0
Like smaller classes	0	1	0	1	4	1
Matured, teachers helped	0	1	0	1	0	0
Met new and interesting friends	2	7	0	3	5	4
More familiar with the world	0	0	0	0	1	2
More disciplined	0	2	0	0	0	0
More confidence in myself	0	1	0	1	1	1
Program is exciting	0	6	0	2	1	0
Reads more, improved	1	4	0	0	4	0
Responsible for my work	1	0	0	0	2	0
Social development	2	2	0	0	0	0
Study and be more accurate	0	0	0	1	2	0
Work is harder, more detailed	2	2	0	0	0	0
Way I like sports	1	3	0	1	0	3

TABLE VII.27 **OPINIONS FROM ESSAYS "HOW I HAVE CHANGED"**
BY PUBLIC COMPARISON PUPILS

Item	Class of 1964-65			Class of 1965-66		
	Sup.	V.T.	T.	Sup.	V.T.	T.
1	2	3	4	5	6	7
Attitude changed toward others	3	3	2	4	8	3
Better attitude toward school, teachers	4	1	1	0	0	1
Concern about what people think	1	0	0	0	0	0
Crafts, etc.	1	0	0	1	0	0
Learned music, art	0	0	1	2	0	0
Learned to work and talk with people	1	1	0	2	0	0
More friends	3	1	3	2	3	1
More interest in subjects	6	2	0	3	11	7
More confidence, better grades	1	0	0	1	2	2
More knowledge of the world	0	0	0	1	0	1
More mature	3	1	2	0	1	1
More respect for teachers	2	0	0	0	0	0
More responsibilities	4	0	2	2	1	0
Read more	1	0	0	4	1	2
Sense of humor improved	0	0	0	1	0	0
Social activities, sports	4	1	2	8	2	6
School work easier	2	2	0	1	1	0
Tests:						
Challenging	3	1	1	0	0	1
Honor	1	0	0	0	0	1
Concentrate - answer all questions - do not waste time	2	1	1	0	0	0
Enjoyable	3	2	0	0	2	3
Easier, learned by doing	3	3	0	0	2	0
Study more at home, want to go to college	1	5	1	0	1	1

TABLE VII.28 OPINIONS FROM ESSAYS ON "HOW I HAVE CHANGED"
BY CATHOLIC COMPARISON PUPILS

Item	Class of 1964-65			Class of 1965-66		
	Sup.	V.T.	T.	Sup.	V.T.	T.
1	2	3	4	5	6	7
Change in arts and crafts	0	4	n.s.*	2	7	n.s.*
Aware of world	0	2		0	0	
Better grades	0	3		1	0	
Change in attitude toward others	5	7		1	5	
Gained friends	0	2		2	4	
Encouragement from family and classmates	1	0		0	0	
Know value of education	3	0		2	0	
Life goals	1	1		0	0	
Like sports	0	5		0	5	
Like subjects	3	4		2	1	
Mature	0	2		0	3	
More responsibilities	2	1		0	2	
Put out more effort	2	2		0	2	
Reads more	0	2		0	3	
Social activities and adjustment	3	4		1	4	
Study more	1	0		0	0	
Teacher influence	0	0		1	4	
Tests:						
Gained knowledge	1	0		0	1	
Helped	2	1		4	0	
Honor	2	1		1	4	
Easier each year	0	1		1	0	
Confidence	0	1		0	0	
Challenge	0	1		0	0	
Fun	0	0		1	0	
Worthwhile	0	0		0	1	
Work harder	0	2		0	1	

* Since this pupil had a WISC of 137, the comments were used in the "Very Talented" classification.

TABLE VII.29 PUPIL IDEAS ON "HOW I WOULD LIKE TO BE CHANGED"
Class of 1964-65

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program Four	Seven	Comparison Four	Seven	Program Four	Seven	Comparison Four	Seven
1		2	3	4	5	6	7	8	9
Comments									
No change		23%	15%	36%	28%	50%	22%	46%	38%
Personal appearance, sex, age . .		33	21	23	26	12	25	13	22
Mental Ability, vocational goal		21	16	5	18	13	13	6	3
Physical ability, health		5	15	15	13	9	34	6	22
Character change		5	23	0	13	0	0	3	6
Someone, something else		13	10	21	2	16	6	26	6
Other		0	0	0	0	0	0	0	3
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.30 PUPIL IDEAS ON "HOW I WOULD LIKE TO BE CHANGED"
Class of 1965-66

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program Four	Six	Comparison Four	Six	Program Four	Six	Comparison Four	Six
1		2	3	4	5	6	7	8	9
Comments									
No change		28%	21%	34%	21%	19%	13%	19%	19%
Personal appearance, age, sex		47	45	26	26	25	41	22	38
Mental ability, vocational goal . .		13	15	4	19	13	9	13	9
Physical ability, health		2	11	4	13	12	25	9	9
Character change		6	8	4	6	9	9	9	6
Someone, something else		4	0	26	13	16	3	28	13
Other		0	0	2	2	6	0	0	6
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.31 IDEAS ON "HOW I WOULD LIKE TO BE CHANGED" BY
PUPILS CLASSIFIED AS "SUPERIOR"
Class of 1964-65

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program Four	Seven	Comparison Four	Seven	Program Four	Seven	Comparison Four	Seven
1		2	3	4	5	6	7	8	9
Comments									
No Change		33%	20%	40%	13%	56%	34%	45%	23%
Personal appearance, age, sex		13	20	20	34	22	22	11	22
Mental ability, vocational goal . .		27	7	0	20	0	22	0	0
Physical ability, health		0	13	20	13	11	22	11	22
Character change		7	20	0	13	0	0	11	11
Someone, something else		20	20	20	7	11	0	22	22
Other		0	0	0	0	0	0	0	0
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.32 IDEAS ON "HOW I WOULD LIKE TO BE CHANGED" BY PUPILS
CLASSIFIED AS "SUPERIOR"
Class of 1965-66

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program Four	Six	Comparison Four	Six	Program Four	Six	Comparison Four	Six
1		2	3	4	5	6	7	8	9
Comments									
No change		36%	29%	36%	21%	14%	14%	14%	0%
Personal appearance, age, sex . .		36	29	29	22	29	43	29	43
Mental ability, vocational goal . .		7	14	0	22	14	14	0	14
Physical ability, health		7	21	0	14	0	14	14	0
Character change		7	7	7	7	0	0	0	0
Someone, something else		7	0	21	14	29	15	43	29
Other		0	0	7	0	14	0	0	14
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.33 IDEAS ON "HOW I WOULD LIKE TO BE CHANGED" BY
PUPILS CLASSIFIED AS "VERY TALENTED"
Class of 1964-65

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Seven	Four	Seven	Four	Seven	Four	Seven
1		2	3	4	5	6	7	8	9
Comments									
No change		18%	16%	35%	35%	48%	17%	46%	44%
Personal appearance, age, sex . .		41	18	29	23	9	26	14	22
Mental ability, vocational goal . .		23	18	12	18	17	9	9	4
Physical ability, health		6	24	6	18	9	39	4	22
Character change		6	18	0	6	0	0	0	4
Someone, something else		6	6	18	0	17	9	27	0
Other		0	0	0	0	0	0	0	4
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.34 IDEAS ON "HOW I WOULD LIKE TO BE CHANGED" BY
PUPILS CLASSIFIED AS "VERY TALENTED"
Class of 1965-66

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Six	Four	Six	Four	Six	Four	Six
1		2	3	4	5	6	7	8	9
Comments									
No change		44%	19%	44%	12%	20%	10%	20%	25%
Personal appearance, age, sex . .		31	50	19	25	20	40	20	35
Mental ability, vocational goal . .		19	6	6	25	15	10	15	10
Physical ability, health		0	6	0	6	15	30	5	15
Character change		6	19	0	13	15	10	10	0
Someone, something else		0	0	31	13	10	0	30	10
Other		0	0	0	6	5	0	0	5
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.35 IDEAS ON "HOW THEY WOULD LIKE TO BE CHANGED" BY
PUPILS CLASSIFIED AS "TALENTED"
Class of 1964-65

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Seven	Four	Seven	Four	Seven	Four	Seven
1		2	3	4	5	6	7	8	9
Comments									
No change		15%	0%	29%	43%	*	*	*	*
Personal appearance, age, sex . .		57	28	14	14				
Mental ability, vocational goal . .		0	29	0	14				
Physical ability, health		14	0	28	0				
Character change		0	43	0	29				
Someone, something else		14	0	29	0				
Other		0	0	0	0				
Total		100%	100%	100%	100%				

* Since this pupil had a WISC of 137, the interview results were used in the "Very Talented" classification.

TABLE VII.36 IDEAS ON "HOW I WOULD LIKE TO BE CHANGED" BY
PUPILS CLASSIFIED AS "TALENTED"
Class of 1965-66

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Six	Four	Six	Four	Six	Four	Six
1		2	3	4	5	6	7	8	9
Comments									
No change		6%	18%	24%	29%	20%	20%	20%	20%
Personal appearance, age, sex . .		70	53	29	29	40	40	20	40
Mental ability, vocational goal . .		12	23	6	12	0	0	20	0
Physical ability, health		0	6	12	18	20	20	20	0
Character change		6	0	6	0	0	20	20	40
Someone, something else		6	0	23	12	20	0	0	0
Other		0	0	0	0	0	0	0	0
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.37

MOST WANTED WISH OF PUPILS
Class of 1964-65

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Seven	Four	Seven	Four	Seven	Four	Seven
1		2	3	4	5	6	7	8	9
Wishes									
None		8%	0%	10%	5%	16%	3%	10%	3%
Desired possessions		31	16	18	5	28	31	26	13
Change in home situations		15	10	10	5	6	6	3	6
Change in school situations . . .		3	5	10	8	7	6	0	3
Have vocational/educational goal		10	15	18	23	19	16	23	16
Change in health, age, sex, appearance		2	10	0	8	3	0	3	13
More wishes		10	10	8	13	9	6	6	9
Things, conditions for others . . .		13	21	3	28	6	10	19	31
Other		8	13	23	5	6	22	10	6
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.38

MOST WANTED WISH OF PUPILS
Class of 1965-66

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Six	Four	Six	Four	Six	Four	Six
1		2	3	4	5	6	7	8	9
Wishes									
None		6%	0%	6%	0%	6%	3%	0%	0%
Desired possessions		34	13	40	24	22	19	41	16
Change in home situations		2	8	4	2	0	6	6	6
Change in school situations . . .		2	11	2	4	3	0	9	0
Have vocational/education goal		13	13	9	13	13	13	13	22
Change in health, age, appearance		7	6	4	6	9	6	0	3
More wishes		9	19	9	9	16	19	9	19
Things, conditions for others . . .		6	13	13	23	9	16	13	28
Other		21	17	13	19	22	18	9	6
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.39

PUPILS' COMMENTS ABOUT
"THE BEST THING THAT HAPPENED TO ME"
Class of 1964-65

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Seven	Four	Seven	Four	Seven	Four	Seven
1		2	3	4	5	6	7	8	9
Comments									
None		21%	10%	18%	2%	28%	19%	6%	0%
Going places		31	20	20	21	13	9	16	6
Getting things		18	21	23	10	25	13	26	13
Intellectual accomplishment . . .		7	31	8	10	22	31	10	13
Physical accomplishment		10	0	8	18	3	13	3	9
In certain groups		5	5	3	8	0	0	19	12
Family, friends, teacher		3	13	10	26	9	6	10	41
Other		5	0	10	5	0	9	10	6
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.40

PUPILS' COMMENTS ABOUT
"THE BEST THING THAT HAPPENED TO ME"
Class of 1965-66

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Six	Four	Six	Four	Six	Four	Six
1		2	3	4	5	6	7	8	9
Comments									
None		7%	11%	13%	4%	6%	3%	9%	0%
Going places		36	17	36	26	9	13	22	35
Getting things		19	15	17	21	16	6	19	9
Intellectual accomplishment . . .		17	26	2	1	28	31	3	16
Physical accomplishment		4	4	6	4	3	6	12	9
In certain groups		2	0	0	2	13	0	6	6
Family, friends, teacher		13	23	17	28	16	25	16	19
Other		2	4	9	14	9	16	13	6
Total		100%	100%	100%	100%	100%	100%	100%	100%

<div>TABLE VII.41</div> <div>PUPILS' COMMENTS ON</div> <div>"THE WORST THING THAT HAPPENED TO ME"</div> <div>Class of 1964-65</div>									
Item	Grade:	Percent of responses							
		Public				Catholic			
		Program		Comparison		Program		Comparison	
		Four	Seven	Four	Seven	Four	Seven	Four	Seven
1		2	3	4	5	6	7	8	9
Comments									
None		33%	20%	23%	3%	44%	28%	19%	6%
Personal injury, fears		49	41	49	54	41	41	45	41
Family problems		15	23	15	23	3	19	26	19
Loss of possessions		0	5	3	10	3	6	0	9
School problems		3	8	0	8	9	3	10	16
Other		0	3	10	2	0	3	0	9
Total		100%	100%	100%	100%	100%	100%	100%	100%

<div>TABLE VII.42</div> <div>PUPILS' COMMENTS ON</div> <div>"THE WORST THING THAT HAPPENED TO ME"</div> <div>Class of 1965-66</div>									
Item	Grade:	Percent of responses							
		Public				Catholic			
		Program		Comparison		Program		Comparison	
		Four	Six	Four	Six	Four	Six	Four	Six
1		2	3	4	5	6	7	8	9
Comments									
None		24%	13%	17%	4%	13%	19%	13%	6%
Personal injury, fears		36	49	43	45	59	44	31	57
Family problems		13	23	19	17	9	19	16	25
Loss of possessions		4	4	6	15	3	6	6	0
School problems		2	9	2	4	0	6	9	9
Other		21	2	13	15	16	6	25	3
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.43

GREATEST LIKES OF PUPILS
Class of 1964-65

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Seven	Four	Seven	Four	Seven	Four	Seven
1		2	3	4	5	6	7	8	9
Likes									
None		3%	0%	2%	3%	6%	3%	3%	0%
Sports, games		13	21	31	8	19	19	19	10
Family, family activities		26	21	15	23	16	3	26	25
School, cultural pursuits		5	13	15	10	6	13	10	19
Getting things, possessions		10	3	0	5	9	16	0	3
Friends, activities		10	8	3	18	6	9	3	3
Animals		10	10	13	8	13	9	3	6
General		23	24	21	25	25	28	36	34
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.44

GREATEST LIKES OF PUPILS
Class of 1965-66

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Six	Four	Six	Four	Six	Four	Six
1		2	3	4	5	6	7	8	9
Likes									
None		4%	0%	6%	2%	3%	3%	10%	0%
Sports, games		15	9	8	4	13	0	10	12
Family, family activities		24	23	30	30	25	38	25	22
School, cultural pursuits		6	13	13	4	13	6	9	16
Getting things, possessions		6	13	2	0	12	6	6	0
Friends, activities		4	4	2	9	3	10	9	6
Animals		13	8	9	6	9	6	9	3
General		28	30	30	45	22	31	22	41
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.45

GREATEST DISLIKES OF PUPILS

Class of 1964-65

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Seven	Four	Seven	Four	Seven	Four	Seven
1		2	3	4	5	6	7	8	9
Dislikes									
None		18%	0%	33%	2%	28%	6%	10%	3%
Certain kinds of people		16	28	10	23	9	25	6	22
Family situations		26	5	10	13	19	16	13	10
Health problems		5	10	0	3	19	0	3	0
School problems		13	15	3	15	3	6	10	18
Foods		3	3	3	0	3	13	13	3
General		19	39	41	44	19	34	45	44
Total		100%	100%	100%	100%	100%	100%	100%	100%

TABLE VII.46

GREATEST DISLIKES OF PUPILS

Class of 1965-66

Item	Grade:	<u>Percent of responses</u>							
		<u>Public</u>				<u>Catholic</u>			
		Program		Comparison		Program		Comparison	
		Four	Six	Four	Six	Four	Six	Four	Six
1		2	3	4	5	6	7	8	9
Dislikes									
None		15%	4%	21%	2%	6%	6%	16%	3%
Certain kinds of people		17	23	13	17	19	9	22	9
Family situations		13	13	6	11	22	13	9	16
Health problems		6	2	0	6	3	3	3	0
School problems		9	15	9	13	12	19	13	9
Foods		4	2	9	4	0	0	6	13
General		36	41	42	47	38	50	31	50
Total		100%	100%	100%	100%	100%	100%	100%	100%

APPENDIX - E

TABLE VIII.1

PARENT RESPONSES CONCERNING
CONTINUATION OF THE PROGRAM

Opinion	Number of Respondents	Percent of Respondents	Percent of Total
Continue	102	62	55
Discontinue	8	5	4
No expression	55	33	29
	165	100	88

APPENDIX - F

RECORDED INTERVIEW A

EFFECT OF REMOVING GIFTED CHILDREN FROM
NON-PROGRAM TEACHERS' CLASSES

Interviewer: "Thank you for coming. What we would like to do is ask you a few questions, just a couple, about some of the factors that have operated during the past five years that have increased the effectiveness of teaching or learning in your classes and then we'd like you to reflect on some of the factors that have reduced the effectiveness of teaching or learning in the classes."

Teacher: "The first thing that comes to my mind that has improved the effectiveness increasingly has been an opportunity to have planning time. Right now I have three periods I did not have a few years ago. While the children are at P.E., music and art, I have an opportunity to plan. Before we had these special teachers it was almost impossible to take care of all the paper checking, the planning, and everything else a teacher has to do and do it efficiently. Now I feel I have some planning time, it makes my work more effective. I also think we have had an improvement in material. Library reference material in particular. I believe we have a larger film library, that is much better than we've ever had before, so I think we have a greater opportunity to make our teaching more creative, better plans."

Interviewer: "What do you mean by creative?"

Teacher: "Well I feel to be creative, you have to first have, the children have had the basic skills and knowledges, but you can build on that with a large source of material, ..many references on topics."

Interviewer: "Are you talking about bringing the creativeness out of them?"

Teacher: "Yes, motivating or stimulating the creativity in them by having more materials to use, I know that's about the only way to motivate creativity. A lot of that has to come from a creative teacher."

Interviewer: "This makes them a pretty active group?"

Teacher: "Yes, I think so, but I do think the increase in materials helps a teacher to stimulate creativity in the children."

Interviewer: "Is this new projects, or what?"

Teacher: "Oh many different things, yes, projects, activities, different kinds of thinking, more of the diversion to the united type of thinking (?) problem solving and that sort of thing."

Interviewer: "This really stimulates the group, do you think?"

Teacher: "I think so, for example, just now we're doing a science-on oceanography. Now, I would say a few years ago we would have been very limited on our material on that topic, but now the library is not the only source of material, the children themselves bring in a lot of material on this topic. But I think we can get away from strictly textbook teaching and branch out in many directions because we do have more materials than we ever had before."

Interviewer: "On this subject of projects, do you find that different people evolve as directing this or that activity in the room?"

Teacher: "Yes, I do, I think we can have a lot of teacher-pupil planning but we can also have a lot of student directed activities, in committees and groups. A number of years back when we had a textbook and that was it, and you couldn't group and have committee work, what did you have to use for materials unless you could get it yourself, so now we can have teacher-pupil planning, have the committee and group work, and have. . .

Interviewer: "I'm not familiar with the terms, what do you mean 'committee and group work'?"

- Teacher: "Well, in a planning section, oh say geography or science, we set up the topics or the problems we're going to work with and then sometimes the child's choice as to which topic she wishes to enlarge upon and we put those children in one group and sometimes its a matter of mathematically dividing them into groups but more often than not its interest of the child in dividing them into groups to work on various subjects or projects and the projects involve some art work."
- Interviewer: "What is your specialty, your grade?"
- Teacher: "Fifth grade."
- Interviewer: "Is there a particular major area you teach?"
- Teacher: "I do for fifth grade. There was one year
- Teacher: "No, it's a self-contained classroom and I have all the subjects except the special ones, art, music, library and P.E."
- Interviewer: "You like the self-contained classroom?"
- Teacher: "I do for fifth grade. There was one year I recall in this building when we tried to departmentalize it, 5th and 6th, but at the end of the year we felt that the 5th graders were just a bit too young for that."
- Interviewer: "You have eight grades?"
- Teacher: "We have through eighth grade, 7th and 8th are departmentalized. But I like this self-contained classroom for 5th grade."
- Interviewer: "Anything else you can tell me?"
- Teacher: "Either one? Much easier to talk about the first than the second because I think we have
- Interviewer: "You say there hasn't been much to reduce the effectiveness
- Teacher: "I don't believe so . . . much more towards the increasing of effectiveness . . . I really can't think of any factors that have reduced the effectiveness in our classes . . . Well now we go to number two, I do think the class size needs to be reduced and in many cases, I have 29 this year which isn't too bad, but I do think reducing classes if it were possible would certainly increase our effectiveness."
- Interviewer: "What's your ideal size?"
- Teacher: "Between 20 and 25."
- Interviewer: "Do they get more out of it, do you think?"
- Teacher: "I think so, more individual help, and I think there is a much greater possibility that you can enrich a program for the better students as well as remedial help too
- Interviewer: "Do you have some better ones in the class? Quite a range?"
- Teacher: "I have quite a range, although we have the split 4th and 5th grades and I think that possibly the split 5th grade has the better 5th grade students in it, more independent workers, although I still have
- Interviewer: "You mean away from yours?" "You have all 5th?"
- Teacher: "I have all 5th, I would say I have 5 or 6 students that would equal any of those in the other room, but the rest of my class ranges much lower, so that I have a wider range than in the split room."

Interviewer: "What are they supposed to be, a lot sharper?" "Ability grouping level?"

Teacher: "It's not strictly ability grouping but it was intended to put some of the more able students in the split room, there are only nine, so that leaves a number of good students in my room, it's not an ability grouping plan."

Interviewer: "Would you be better off if you didn't have those nine in there, do you think?"

Teacher: "No, oh no, I want them in there, makes the range wider, I think it stimulates the others, but I do wish I had a smaller class, I think I could more effectively enrich the work of the better students and also have time to help the slower ones. Other than that I don't think of factors that reduce the effectiveness. I would like to have more reference materials and perhaps a little more, or should I say, a little less rigidity in the textbook pattern, we have a textbook policy, every child has the same set of textbooks and that sometimes makes it difficult to plan a program for the levels of intelligence, ability . . .

Interviewer: "Do they have different levels?" "For the same 5th grade?" "Are they?"

Teacher: "Not to a great extent that I'm aware of . . .

Interviewer: "You were saying having different textbooks

Teacher: "I was saying different textbooks and, well perhaps as an example in reading, if I had, in sets readers on other grade levels, that were not being used in the other rooms, then I could probably group or individualize our reading program much more effectively."

Interviewer: "Even though you have more reference materials that you used to, you still feel that you could use more?"

Teacher: "Oh yes, much more in this building than in some I'm sure. And I wouldn't want sets of textbooks in other areas, other than reading, I don't believe, because there are some subject matter areas like history or science I think we need to be working on the same topic or unit as a class and I think it's quite possible to reach the slow learner and the fast learner within that topic."

Interviewer: "With the reading you want it varied, for interest?"

Teacher: "Interest and reading fields and reading ability, and enjoyment. I don't believe any slow reader enjoys trying to read something that is much too difficult, and on the other hand very good readers are bored with something too simple."

Of course, we have a few gadgets that have increased learning effectiveness-the overhead projector that we've had four years. I believe that has been the attention getter with the children. They would sometimes look at the screen where you might not have their attention on the chalk board and I think the prepared transparencies that we have been able to order are very helpful. I'm using them in science and geography especially, a few in math, of course we make our own, and I think this has increased the effectiveness."

Interviewer: "Is that it, unless you can think of some more?"

Teacher: "That's it, I'm a rather slow thinker today."

RECORDED INTERVIEW B

EFFECT OF REMOVING GIFTED CHILDREN FROM
NON-PROGRAM TEACHERS' CLASSES

- Interviewer: "I want you to, if you would, comment on some of the factors that have operated during the past five years that would increase the effectiveness of teaching or learning in your classes, and then later comment on the factors that would tend to decrease effectiveness of teaching and learning in classrooms."
- Teacher: "About last year and the year before we decided according to abilities."
- Interviewer: "What grade do you teach?"
- Teacher: "Fourth grade. We had two fourth grades and last year I had the slower group and this year the faster group. One year we had three, we had middle, which is average, fast group and the slow group, and to me that's the best way in teaching grouping children."
- Interviewer: "More effective that way?"
- Teacher: "Oh I think so, now this year we have some slow ones, we have some fast ones, we have some average children, all mixed together, and to me this isn't working like it should."
- Interviewer: "Which group do you think you get the best classroom work?"
- Teacher: "Oh, the faster group,"
- Interviewer: "Even when they're separated?"
- Teacher: "But some people say the fast children help the slower children when you have them all mixed up, but to me it really doesn't. The faster children get through and then what do you do with them, the slower ones haven't caught up yet. And when you add according to grouping, then they all get through at the same time and you can forge ahead."
- Interviewer: "Do the discussions vary in the amount of activity? Do you find different kids be more active in the groups, etc?"
- Teacher: "You mean when they are grouped according to ability? Then they stay on the same speed and the same level all the time."
- Interviewer: "When you have your class discussions, etc., do you find the same amount of active participation?"
"Or do you find different people in different groups, etc?"
- Teacher: "In the fast group they're about all the same I expect, there will be a few in the slower group that will come out more than the other children. To me that's the most effective way of teaching - grouping. And then again this group that I have now which were divided according to fast ones, average ones, and slower ones."
- Interviewer: "Which ones achieve most in the class?"
- Teacher: "The fast group, yes, they really do, and projects now, I do a lot of projects in my room, and you can't do much with the slower group as you can the faster group, but this year now we're doing a few projects, of course there are those who finish their work first, the way I do a lot of it. The ones that get finished first, they do something else. The projects, like have to do some drawing for social studies. We're studying about nine cities in the United States and we're drawing New York City, one group is making the Statue of Liberty, and when they can see things and do things, it helps the

process to be more effective. In Seattle a group is doing the big trees. It's lumber up there, and they're drawing some people cutting the trees, you know, but they're having a little trouble drawing people, at that age."

Interviewer: "Does it develop . . . ?"

Teacher: "No, no but it's fun to see how they do projects with art, the art work is coming along." "I think it's more of a learning process when they can actually see something going on."

Interviewer: "You teach everything at that level?"

Teacher: "Oh yes, and then in spelling we have a lot of spell-downs which they just love, and of course, in spelling it takes quite a lot of writing too. . . they like that writing on the board when they have a spell-down. . . I'm trying to think what else we do different. . . the projects, the dividing according to ability, of course now I have a teacher who is a great amount of help this semester. She can do a lot of things you don't have time to do. Now the learning process goes on better too, if you have smaller classes. I have 33 this year, over 25 is too many, you can't give individual help. This is where the teacher comes in on projects, she can take little groups."

Interviewer: "You work special with them?" She does. . . ? Gives you time to prepare other things?"

Teacher: "Yes, right."

Interviewer: "Do you have any preparation time?"

Teacher: "I have now, we have art once a week for 45 minutes, so that helps a lot, I can get something done."

Interviewer: "Do you have a special art teacher?"

Teacher: "Yes, we do not have a special music teacher, but that art time. . . and then we have library. . . for 45 minutes once a week which helps a lot, we can prepare."

Interviewer: "Do they like the library. . . ?"

Teacher: "Oh yes, they like the library, another thing that we do in which learning is carried on, we have a lot of news reports. I have them cut clippings from the newspapers and then they have to tell us what is going on. By reading the newspaper article and then not looking at it and getting up in front of the class and telling us what is in that newspaper article. The fourth graders love that. It's surprising what articles they choose, you wouldn't think fourth graders would choose. . .

Interviewer: "Can you tell which ones will be the radio announcers and which the T.V.?"

Teacher: "Yes you can. It's really surprising, they choose real good ones. Of course, we have a rule, they are not to choose anything that has to do with a lot of killing, murder, things like that."

Interviewer: "You like the mixed group better this way? Or do you like them separated?"

Teacher: "I still like the separated group. I think they get more accomplished, much more accomplished."

Interviewer: "What has taken away from the effectiveness of teaching or learning, that you can think of?" "Or added to it, either one. . .

Teacher: "Let's see, taking away from the learning is your discipline problems. Right now I have one little boy who is taking away from the learning process, all our time is spent 'don't do this', or 'don't do that'.

Interviewer: "He bothers the others, does he?"

Teacher: "Yes, even in class when we're carrying on a discussion, he will bother. That goes on in every room, you have your discipline problems which takes away from the learning process, you have to correct and sometimes the children lose the train of thought that is going on. Also I think taking away from the learning process is the number of children in the classroom. I think no more than 25 because the more you get the more people you have to handle and you can't teach them. . .

Interviewer: "More is here and a mixed group."

Teacher: "Yes, instead of a separated group."

Interviewer: "Now what about Miss —, does she have a separated group?"

Teacher: "She has a mixed group."

Interviewer: "How does this happen?"

Teacher: "Well, Mr. J. decided we would have a mixed group this year, 4th grade, and we separated for reading and arithmetic, first semester Miss L. taught the two reading classes and I taught the two arithmetic classes, but it was come and go, come and go, no changing rooms. Miss L. didn't like it too well, and I didn't like it too well. . .it was just hustle, bustle, because sometimes they have classes — some days you spend more time on arithmetic, or more time on reading, maybe more time on English, and we couldn't do that when we had to teach a certain time for each subject. Certain time for reading, certain time for arithmetic, so we asked Mr. J. if we could stop doing that and teach our own arithmetic and our own reading."

Interviewer: "Do you kind of go at your own speed?" Do you have to accomplish a certain amount?"

Teacher: "Yes, at your own speed. You have to accomplish it, but some days you may do more than other days. When we had the other grouping you only had this certain time and you took away from something maybe that needed it in another class. So we're back to the own class teaching."

Interviewer: "You'd like to get back to the other though?"

Teacher: "Yes, I would. If we could go back to it I think we might. . .

Interviewer: "Miss L. too?" "You would have two groups?" Or three?"

Teacher: "Oh yes, definitely. That's what we did last year, had two groups. . .we had three when we had more students. I think about three years ago we had three groups, but since then we've had two, because we hadn't enough children for three groups."

Interviewer: "Well, what else can you think of, either way?"

Teacher: ". . .more than we have. You know the. . .1 and 2 down below the hill? We didn't get them all those things. . .like each room could have an overhead projector, we only have one or two in the whole building. Some of those schools have one in each room, so I would say supplies decrease effective learning, if you can't have all the supplies that you need."

Interviewer: "What do you need?"

Teacher: "Well, like the opaque projector would be fine. We can throw things on the wall, all those things. . .

Interviewer: "Even if they had the money?"

- Teacher: "Yes, if they had the money we could have all these various things, would add to effective learning, but which we can't have." "We try to do the best we can with what we have, but sometime you don't have enough. Oh we have enough paper and things like that, but there are a lot of new things coming out that would help a lot that we don't have. I think Title 1 and 2 have done a good job, because they have a lot of things."
- Interviewer: "You'd just like to have part of it."
- Teacher: "Just part of it is right." The most effective you have just given us."
- Interviewer: "What?"
- Teacher: "The Stanford Achievement test - four through eight, we've given it. This is the first year this has been done."
- Interviewer: "Do you think this is going to help?"
- Teacher: "Oh it does help, definitely. One time the fourth grade was given this test at the beginning of the year and at the end of the year, and I really liked it that way. You could really see what they had done during the year, improvement. But we haven't been giving it in fourth grade. The fifth grade has been given it once a year, but we haven't. . .and it really does tell you something about the child, and if he isn't working up to capacity, you can see it right on the test what he should be doing, and he isn't doing it. I had a conference with each parent, called them over and showed them the results to them and they were really pleased and we had never done that before."
- Interviewer: "Did you tell them. . . ?"
- Teacher: "Yes, now your child is weak in this subject, section, paragraph 3-4, and I think the parents understood that. 'Well, I'll have him get the library book out, I'll have him read it'."
- Interviewer: "Tell them how to get more meaning out of paragraph. . . ?" Do you think it helped relationships with the family?"
- Teacher: "Oh yes, with the family. I had a lot of response. . .some of the families didn't come but I think there were five I didn't have conference with, but it was surprising how many did come." Took time out of their busy day, some parents don't do anymore, you know."
- Interviewer: "Was this in the day time?"
- Teacher: "Day time. I have this priceless teacher and scheduled conference about every five or ten minutes, didn't take too long to talk."
- Interviewer: "Did you have very many fathers come?"
- Teacher: "I had three fathers who came, with the mothers. One came by himself, the mother didn't come."
- Interviewer: "Very good, I do thank you."

RECORDED INTERVIEW C

SAMPLE OF INTERVIEW WITH A TEACHER IN THE PROGRAM

Interviewer: In order to obtain a more comprehensive evaluation of this Program that you have been associated with, the Research Committee of the Program for the Academically Gifted would like to have you comment on some of the following topics. We would like to have you comment on some of the factors which you feel have contributed to the teaching in the Program classes.

Teacher: Well, to start with, the basic materials, I would say, that the additional texts, maps, things of this nature, whatever I have asked for, have been provided in a reasonably short time, have certainly helped. I know in my particular area the last couple of years I taught social studies, and we actually used the textbook as a jumping off point, so to speak.

I did feel, particularly in social studies, the fact that we are supposed to have one semester devoted to history and one semester devoted to geography, in many ways hampered. I would rather have taught social studies per se and taken a given area of time and land, and developed all things in that area, whether it is how the geography affects, you know, the climate and historical movements, and so on, because I have found that there wasn't time really. I know last year in the seventh grade they were supposed to cover Latin America, South Africa, Central America, and Mexico, all in one semester, and the type of work that we were doing was basically project work, and in that particular area we had groups taking a geographical area and they would develop a report and then present that report in both written and oral form to the class. Some of the things they included were the dishes of the country, music of the country; in other words, we got a complete cultural and geographic picture of of that area. And because we did this, and also because of the time we had to give to the special projects Bradley wanted, we really didn't get into South Africa. In some respects I went ahead, but it bothered me, you know, it bothered me. The same thing had been true at previous times, because you go so far, and, of course, you can't go in depth on everything, and you have to pick out what you are going to do, but I would rather see a continual program--well, like sixth graders, they cover Europe and Asia in one semester; well, that's ridiculous, you know, you don't cover Europe and Asia in one semester. And then the first semester they study, like medieval history, and the two are, you know, there is some relationship, but there is not that much. I would rather take, like medieval history carrying it through to the present, which in some instances we did showing how European countries with, you know, their present set-up and life. Some of the problems today actually relate back to the ways in which they were set-up and so on, and I would like to see them maybe take a whole year and devote it to the development of Europe and all its areas, and then maybe take another whole year for Asia, because I think today Asia, particularly with Viet Nam, and some of the things, is something we haven't, I know I as a child didn't learn very much about, and now these kids come in and they don't have any idea what part of the world it's in, so I would say if you could take a social studies approach where you include the anthropology, sociology, geography, and show how they are all interrelated, because the kids like this. They get a much better picture, they are more interested, and it seems to help them understand today better.

Interviewer: What is keeping you from doing this?

Teacher: Nothing really, I just went ahead and did it, as far as I could. But, what I say it is hampering, is the fact that, well, like the sixth graders, they are supposed to have some semester that they are supposed to work with this particular book, and another semester that they work with the geography of it. Now I combined it as much as I could.

Interviewer: Who says you must cover this?

Teacher: The school board; it's right in the curriculum guide. And I was told that I am still responsible to the curriculum. And as I say, I went on my own anyway to a certain extent, but I had apprehensions about it. I didn't feel free to go as far as I would liked to have gone, you see, if I am making myself

Interviewer: Would you state where the stipulation came from, and why you would like to depart from this, and what you might want to accomplish if it were possible?

Teacher: We really end up with it chopped up, because now as I understand it, they go back in the eighth grade and they recover much of what they covered in the sixth grade, you know, in a survey type, and then they throw in a few other things, like Australia, and particularly with these children, I would like to take the complete picture and develop it from the cave man into the present time, including-- Because they are capable of it; they really are, particularly at the junior high level. There is so much, you know, we did so much research work and project work; in some instances I had them do it individually, and in other instances we did it as a group. I felt if we did this-- Well, let's take Latin America as an example; the test covers all the Latin American countries. The text I just told them to read on their own, frankly, and then we went from there. Now I did not expect each child, each group of children, to learn in depth, let's say, those children were studying Brazil did not study the, oh, mountainous areas along the western coast; in other words, they did their in depth studies in a limited area, and then shared. Then they asked questions. In the sharing classes I allowed them to use film strips; I made my library card available to them. They used the overhead projector with transparencies; they used the wall maps. Some of them even made up little study guides for the class, you know. This helped them to organize what they were presenting too. I find the biggest problem with them is that they want to give too much information, because I had to give them a time limit.

Interviewer: The materials are quite adequate then, you feel, too--

Teacher: Well, in that particular instance I went to the library as well and got about twenty or twenty-five additional resource books, and many of the children had Time and Life series and things at home, and materials were not a problem. Time and--this type of thing I felt was more of a problem. As I say, I went ahead and did it; now, you know, in the future I will be criticized because they didn't study Africa. Right now I don't know, but I felt we got more out of it, and they had a better picture.

Interviewer: You are saying though that the school library was lacking in materials and you had to go elsewhere for materials?

Teacher: I wouldn't say that the school library was lacking. The problem is that we aren't the only ones that use the school library, and I didn't feel like I had the right to strip the school library of materials when there were other junior high classes in the building also studying, you know. I brought other materials in; it wasn't, you know, that big a problem. I just didn't feel that it would be fair to take everything out of the library and put it in our room, and deprive the other classes. That was why I had to do it that way.

Interviewer: These other--you got them from Bradley or the downtown library--

Teacher: Oh, some of them were from the downtown library and some were from the branch libraries. And then some of the children, you know, got them out on their own. Material in that particular instance was not a problem. The time involved in-- These students do their research very adequately; other children don't know still, they try and take everything verbatim from the research material they are using. I have tried to encourage them to use note cards and take notes in their own words and let them indicate on their note cards where they got the material from, and then when they are finished with their note taking, then go back and eliminate and if you've got a conflicting view or report or whatever, then indicate so.

Interviewer: Do they take to this quite well?

Teacher: Yes.

Interviewer: Well, what other facts do you feel might have contributed to the teaching of the classes? Or, what should be changed?

Teacher: Well, year before last we did some grouping above and beyond the regular classroom division; in other words, we took, well, we did it last year in English and German, but those are the only two; last year I took the better English students and German students and I had them for English and Mr. M.

had taken the ones who were not quite as adept, and while I had them for English, Mrs. I. had the other group with German, and, of course, we switched. Now, this was good to a point, although there were some people in the other English class, in Mr. M's class, who could have done the work that my people were doing, but they didn't have the proficiency in German. Now it wasn't necessarily that they weren't able to; sometimes it was a personality conflict. In some respects I felt that wasn't always the fairest way to do it, but yet the people that I was working with, they basically knew their parts of speech, phrases, and we could go from there with the creative writing, structure, and so on, and so we did. But now the year before with Mrs. P. and Mr. T. and Mrs. W. was there, we had Mr. M. the second semester, but we took the better math students, in other words, I had been working with the sixth grade; half, or a few, from one class and another from my class, in other words, the best math students were allowed to go to class together and work, you know, from their point, whereas those that needed more remedial work just weren't ready to move ahead at the same pace as the other ones were. Some people said the kids are going to call it dummy class, and this and that; well, if there were some way of doing it so that—I say the division is not the same. We split for math, reading, science and social studies, and the same people weren't in the best class in each instance, although they probably would be in two of them. Now I know there is the matter of time and space and so on, but I think that particularly with that seventh grade over at —, they need to do more grouping because I would say a full half of them do not belong in the Gifted Program. I realize that they were the first class, and selection was relatively new, and I was told they had to have a child from each school, each district, and so they have a lot of children in there who are good students, but they are way, way below your best students.

Interviewer: How do these differences show up; in other words, differences between the better ones, and the ones you don't think should be in there?

Teacher: Well, it goes back to this, I think philosophy of the Program. I am curious at this point as to what it is. In the beginning I was told that they were trying to recognize and take the children who had high ability; now whether those people had been high achievers or not, they had the basic ability and were identified by a series of tests and put in the program.

Now I know there are many children who have never made particularly good grades that were put in the program. We were told at that time that, well, this was our challenge to make good students out of these people, that they had the ability. I think that is fine, but I think there is a whole lot more to making a good student than pulling them out and putting them in, because in some cases it is glandular, some cases it is mental, sometimes it is the basic personality of the child. You know yourself there are a lot of adults that have tremendous ability, but they have never begun to use it. Now I don't think that segregating them when they were at a certain stage and putting them with other people and competing is necessarily going to change them. I think maybe they need two programs; I think maybe they need a program for the academic achiever with high ability, and use certain techniques for them, and then I think maybe you need another program for the underachiever with high ability, because it certainly takes different techniques. I know having had both in a class, you end up—well, it's just like a regular classroom teacher who has the highest to the very lowest, you end up with the middle, you know. I don't necessarily say that I want to end up teaching the middle group, but I felt like given the time and a separate situation that maybe I could have done more with these people who haven't achieved and had the ability.

Interviewer: You think if you had the two separated, in other words, you would have worked with either one, but your methods must differ as opposed to the other group?

Teacher: The thing I have seen is that these people who have not achieved are competing with the very high achievers. I've seen frustration; I've seen withdrawal; and I've seen, you know, them sit back and let them do it. It's been a— I know one girl I felt like I finally got through to last year a little bit—it goes back to this same Latin America thing—the only time I really got some real good work out of her was when she knew that when they gave this report, I think they were doing Mexico, the group, they were going to do a bull fight, you know, with the costumes and the whole bit, but she had to prepare the other work so she could do this, you know. I won't say her work came up to the work of the other girls in the group, but at least it was more than I have had ever received from her before, you know, so in that particular situation it worked.

I don't pretend to know what the answers are; all I know is that there are some people that are—if I had them separate, I could go so far with, but because of time and the other people, you can leave them. You can't leave the others just sit because then they would withdraw even more, and they feel like you are favoring, you know, the other ones, and the same thing is true, it is much easier to give something, I won't say busy work, but I mean try to get another challenge that appeals to some one who is really talented. In some instances they will take this challenge and go on, but in other instances they realize that it is just an additional challenge you are giving them while you try and, you know, work with these other people, so I would like to see more of this segregating, I guess you would say, or grouping, particularly with that particular group. I don't think it is going to hurt anybody's psyche to be in a slow class. I think that many of them appreciate knowing that they are getting a better foundation, whereas if you just throw them together, they sort of think or plan on their own; I mean, we do give the children individual attention, I don't mean that we don't, but it still goes back to the same thing.

Interviewer: Are you suggesting then that this grouping bothers me a little bit—are you suggesting that maybe some who don't belong in the program should go back, or be back, in their own classes where they should have been to begin with instead of being in this program?

Teacher: I don't think you can move back your older kids that have been with the program this many years. I think we just kind of have to work with them. Now your in-coming people, I don't know. Maybe you should have a, say at the end of the fourth grade, a big consultation with all teachers and parents, sort of an assessment period, and maybe at the end of the second year, or maybe at the middle of the second year, because I realize a lot of children that first year—it is just a plain adjustment period anyway, and it's pretty hard to tell. I wish they would be more selective when they take them in the first place; I think they should do more psychological testing—

Interviewer: Of what nature?

Teacher: Well, in examining the basic personality. Is this child— Oh, I guess it goes back to the question of philosophy. Which is it? Are you trying to take children who have ability, and who work and go with them as far as you can, or are you taking children who have ability who may or may not work, and go with some as far as you can and hope that you can stimulate some of these others. I don't pretend to know, you know—I would like to know what they are trying to do, what the philosophy is now in the selection, because I haven't been with a new class, but I would think that in terms of results of this study that they are going to see more results in working with the achievers.

Interviewer: You said a few moments ago that the—perhaps a conference at the end of the fourth grade would be advisable with the group now. The parents do have a conference with the teacher, I guess, isn't that right? Are you suggesting something beyond this?

Teacher: Yes, I am suggesting involving, let's say, all of the teachers who have worked with that child plus maybe the people who have been involved in testing her, and then the parents as well. We have had conferences with the homeroom teacher and the parent before report cards go out; in some instances we have scheduled conferences where all four teachers meet with the parent, either at the teachers' request or the parents' request. This is done on our own, but I am thinking more in terms of a formal evaluation for those children who have evidenced difficulties; you are going to need to set it up some way so that no stigma is attached if the child is— I know this is a sticky thing; I know a lot of people want their kids in the program because of the status for them you know, and this is only human nature, but I also think that a lot of well-meaning parents, if they realized that it wasn't to their child's advantage, you know, work with them that much. I just know that there are a lot of children that I, particularly in that seventh grade, that— If not that, then have smaller individual remedial classes in given areas for them. Now we did it last year with some boys who were not slow, but because they were so bright—this one boy knows more history than any one person I have ever met, and I had a problem with him because he felt I was squelching him in the classroom, but he would get into something, that he wanted to talk about it, and he would take the whole class period, you know, himself, and I finally had to call him aside. I said I love talking to you, it is most interesting, and I said I am sure you and I know what, you know, you are talking about, I said, but I have a responsibility to these other children, and I said we are leaving them behind, and I said it's not fair. So I talked to Mr. D. about it, we ended up by having Mr. S. come in one day a week; he met with this boy and

others. He gave them additional readings and discussions, and so on. As I understand there was only one boy that Professor S. felt really didn't belong there; now whether it was because of ability, I don't know, but that was the way we resolved that. In some cases I think maybe you need to go the other way.

Interviewer: This boy enjoyed that?

Teacher: Well, he wasn't the only one; I put six in there. We took because we didn't want it on a one to one basis in terms of discussion; that doesn't work very well.

Interviewer: These other boys were interested though?

Teacher: Yes, these other boys were real history bugs, and you know, they would dominate the class if you gave them a chance. Well, this is fine, but the people who don't talk, they have opinions too with the dominate ones gone, because some of these children are quite out-spoken, and if they don't agree with what some one has said, they might come to the point where they don't speak out loud about it, but, you know, they can still make a face or say something later. I think one of the problems is they need to realize that other people have opinions, and their opinions are just as valuable as their own. In my opinion this made this student very happy, and this is a boy that could be in charge of a nation's anthropology or something; he has that much ability and interest.

Interviewer: But you are saying we should go the other way too?

Teacher: Yes.

Interviewer: Any other comments pro or con, for or negative to the program that you have heard from teachers, parents, children? Do you think the program should be continued.

Teacher: Oh, I certainly think the program should be continued.

Interviewer: What is the worthwhileness in it as you see it?

Teacher: Well, the fact that we are able to take these children beyond the classroom instruction unit. I think when these children are in high school and college you are going to find that use of reference skills and their ability, at least the ones that I have been working with, I feel their ability to communicate both orally and written, and to organize, and to see through. This is the type of thing that I don't think is possibly going to show on the type of tests they have been given, but I feel-- Well, you know yourself, with all of the vast amount of information that is available in all areas that the adults of the future cannot possibly begin to comprehend and know all of it, but his ability to know where to go and to use what is available, and to organize and so on is going to be a very plus feature. I think this is one of the areas that we really have been-- I would like to see more in-service training for the teachers in the area of having common goals or common standards for the children. I have found that, well, I know of one instance where the teacher would accept a paper--would not accept a paper if there was a, you know, withdrawn word or a cross out--in other words, it had to be like a photocopy, you know. Well, I think this is well and good, but I also know there are several children who have terrific handwriting problems anyway. Now whether, in some instances I think it is a spastic type thing, there are just very, very nervous type children, and, yes, I want to encourage these children to do their best, but I know that some of these children have become so frustrated when they have torn up ten or eleven papers trying to get one perfect paper, you know. This has colored their whole attitude toward that particular subject, and I think you have to do this within moderation. I know for myself, a homework type paper, a paper that they have time to prepare, I think should be neat and void of all these mistakes, but I also know something that you ask them to write in the class that you are interested in thoughts, you know, that you can't expect perfection in the presentation of it. I think you have to take that--

Interviewer: Then you feel that common standards or goals should be set up as far as you are concerned among the teachers, is that right?

Teacher: Yes.

Interviewer: You mentioned a few minutes ago that the tests do not adequately measure the achievement, whatever you are trying to do with this special program. Do you have some suggestions along this line as to what other methods we might incorporate in helping us determine what progress has been made, or what we are looking for with these special children?

Teacher: Well, I may or may not be correct in that statement. I am just basing it on the fact that throughout the testing I have been told that there wasn't that much difference between these children and the control group. Now if they are comparing, let's say the STEP tests, and this type of thing only, then I can certainly understand why it would not be true. Now I think some of the progress things they have had the children do might more adequately give an idea of what has happened. Unfortunately as I see it when they have had them do these project type things they have been at the end of the year, and there has been so much, oh, maybe I shouldn't say pressure, but there is so much happening at the end of the year in terms of time that by that time they have done a number of projects for different areas that at that time that is the last thing they want to do, so maybe if they would do something in the fall that they would have the child do it, and have it set up so that the child's teacher—so that the child wouldn't be expect to do it all out of the classroom, you know, at the same time they are doing their other classroom work, and have maybe take a week of a given period, whether it be English or social studies or science, or whatever it is, and give the child the problem, and during that time have those children work on the problem, independently and maybe give the teacher instructions not to suggest—in other words, this is their problem on their own, and maybe that type of thing would do it, because as it is now— All I know is that these come at the end of the year, and the kids are tired.

Interviewer: You were talking about tests or measuring accomplishment and so forth, and I asked you if you had any ideas along this line; we kind of got off the track here. Do you have any other suggestions along this line?

Teacher: If you are thinking in terms of the grade we have to give them I am not happy with the grading system, particularly where you have the wide range of ability that you did in that one class. We find it with some of the other children too. Of course, at the present time we use As or, but everybody has their own standards, and I know with the type of— I'll use my own self as an example; when we have done project work, the amount of effort expended by the child, on the given project, let's say that we are doing, the way that they use their time, the product which evolves, their ability to discuss it. This is something which I try to evaluate, but, of course, it is a very subjective thing. And so then we have an objective test; some children take written tests very well, and then other children, either because they don't take tests well, or because they didn't bother to study, which some of them don't, some of them seem to think they can just go through something and they have it; well, some can and some can't. I find that my best students are the ones who go back and review while the ones who need to don't, but in terms of grading, I would rather have, and I know this fouls up the records, but I still would rather have them doing outstanding work, or let's say interpret the grades differently, and not a numerical grouping as it is now on the card; in other words, outstanding work above and beyond, full value extended, let's say for an A, and then for very good work maybe for a B. Now again you are getting into a subjective area, but it is not tied to any numbers. Kids want to see either letter grades or numbers on papers that are given them. I like to condition them the other way. I know whenever I have them do creative writing I refrain from using letter grades, and yet I still have to put a letter grade on their cards. Do we expect the same from all children? Now we have children who are outstanding in, let's say science area; I am thinking of one boy in particular, and up until last year he did not expend his energy in any other direction except science, and I finally got through to him a little bit, because I said look, I said, when you go to college you will probably want a scholarship, and he said yes because he had an older brother who would be in at the same time, and I said well, realize when you go away, I said, they are not going to be evaluating just on your science, I said, plus the fact that regardless of what you do with science, you have to communicate, whether it be written or oral, and after we had a couple of talks like that I noticed a tremendous change in his attitude toward his other work; he still doesn't particularly like to do, let's say, social studies, but at least he realizes that his ability to do something that he doesn't particularly care for came through.

I know I have gotten away from the original question here. I wish there was some way that we could indicate other than that, because some parents are so grade conscious that, I know one little girl that I doubt that she would ever do above C work, she shouldn't be there, but she is there, but she is

a hard worker, and there have been some instances where she has, you know, done all kinds of extra work and everything, and I have given her a B, when really if I judged the quality students who based on the same way I should have given them a lower grade, but because of again of that certain attitude and so on, I have raised the grade. I would like to know, you know, whether you are right or wrong, and yet all teachers won't do this. Some teachers just add just the numbers and divide, and that's it. I think again in that we should have a common understanding of how we are doing it.

Going back to this in-service training, that would be one area, I don't think it has been fair to the teachers that they have hired that they have plunked in the program without any previous orientation. I also don't think it is fair the way they hire teachers in some instances. I am not pretending to be the best, or one of the best, you know, in terms of the teachers that you have, but I am sure that there are some of us teachers who have something in common. I am thinking particularly of —, and some of the ones I knew very well at —, and Mrs. P.—there is a certain type of attitude towards children, there is a certain— In other words, you are with the children, yes, you are teacher, and they are students, but still the children can talk to you, and you make them feel that what they have to say is worthwhile. Now they may not always be right, and you may have to help redirect their thoughts. I know that there have been some teachers who feel that they are teacher, and the children are the students, and the teacher has the final say, and that they have been hired to teach these children a given amount of information, and regardless of what the children want to do, or how they feel, that that's the way it is going to be. Well, I think you get these conflicting personalities, and I know that children have to learn to live with all people, but maybe we should do more in terms of trying to develop the same type of teacher, in the sense of their relationship with the children. Maybe I am all wrong; maybe they need all different types of personalities. But going back to hiring people without previous indoctrination in the program, I would suggest that maybe two weeks before school, or a week before school, that they have a sort of in-service workshop, or seminar, and the people who are new in the program plus the people who have been in the program get together, and, if necessary, pay us for those days, but let those of us who have been with it, maybe in some instances, give help to those who are coming in, and exchange—because everybody find different ways of doing things. I mean there is very little time for us too for us, even those who have been in the program, to exchange ideas. I know periodically we have these meetings, but it seems to me they are at the wrong time, at the end of the school day and everybody is tired, and are thinking about getting home. I would like to see more of this type of communication.

I would like to see more help from consultants. I know when Dr. H. was first here that she would actually go and sit in a classroom and observe, and in some instances maybe she took over the class for a given period of time, experimenting and maybe illustrating or demonstrating to the teacher a different way of doing something. I know we are allowed to go and visit different schools. I know for myself I didn't request it last year, because I felt so pressed time-wise, that I had so much material that had to be covered that I didn't feel like I could give the reins over to someone else. If you don't feel like you can—maybe, you know, it is the wrong kind of pride or something, but you know they are not going to be doing necessarily what—you are going to do it over again when you came back to see if the kids, you know, got the point that was being done, or else you make up some kind of busy work for them to do while you are gone.

I would like to see us going to more workshops, maybe at the state level. I would like to see more communication between some of the other gifted programs in the State. I think even when you go and observe, you see a very little limited area, you know, and if the State is sponsoring the gifted program as such, all right, let's have some of the teachers who are teaching gifted students, even outside our own area, get together.

Interviewer: Well, that might be possible. Do you have any other comments regarding things that have taken place during your three or four years of teaching here, good or bad?

Teacher: Well, the first year I was in the program, I was in the parochial section of it, and I know the prerequisite for my going to work for — at that time was that I attend as much as possible that workshop over at Bradley dealing with gifted children, which I did, and which was really enlightening. The next

year I went to another one; in some instances some of it overlapped, but the one I went to—it was a three-pronged approach, self-assessment, modern math, and the gifted child. I found that particular workshop, particularly the self-assessment section, the most vital thing I have ever been involved in.

Interviewer: This self-assessment, what was this?

Teacher: Well, before the end of the school year we were given questionnaires with sixty or seventy questions which we gave to the children, and they in turn evaluated us anonymously, and they were asked questions, such as, I think there were five possible answers, always, part of the time, half the time, seldom, and never, and like, our teacher always makes homework assignments clear; my teacher ridicules certain students in front of the class; my teacher lets us know what her political views are; my teacher is a happy teacher; and so on and so forth. Some of them, looking back on them it is evident that the children didn't really understand the questions, because they would have two questions meaning the same thing, and they would contradict each other, but still it was real interesting to see how the children felt about me. Now you can't look at it and think that this is the end all and be all, and some areas don't meet with your own picture of yourself, you know, that's the truth, but I think you should also look at it to see if there is validity to what they are saying. After we got into the workshop itself, then we were introduced to, I can't remember the name of the process, but before we tried to evaluate whether we taught inductively or not, and in this respect we were taught to, we had someone to analyze us when we did some actual teaching, analyze what was happening to the classroom. They used this ten point scale, and then by plotting this on a graph we could see whether we did a lot of lecturing—I know in my own particular case I found that—like a four was asking a question and an eight was the child's response—so I would go for eight, and then if someone added on, it was a nine; well, if you gave praise or accepted their idea, or respected their feelings, now they split those two things up; anyway it gave you a picture of the pattern of what was going on in the classroom, and then you could see yourself how you were doing things. Now you are not going to do things the same way every day, because in some instances, yes, you will be lecturing, you will be giving information, but at other times there is a great deal of back and forth, let's say.

We were also taught to evaluate the type of questions we asked. Do we ask a question that calls for a memorized answer, or do we ask a question that allows the child to reach a conclusion? Do we ask a question to which there is no answer? In other words, I want to know all about the type of question I was asking. Sometimes we shut off the answer by asking the wrong type of question. It may be this is something which is taught in education courses today, but it is not something that I was made aware of when I was in school. In talking to people in school, we find that the type of thing we are getting in these workshops still has not filtered down into the regular classroom.

Interviewer: You felt this session was very helpful, as I understand?

Teacher: Yes, very much so.

Interviewer: It has not been continued though?

Teacher: No, I got one letter which said they were going to do some follow up; we had somebody, whoever was the director from Sterling, said he would be around to visit us, but he hasn't. I know they hoped that we would take this back into our schools, and make the other teachers aware of it. I know the particular building I was in there were probably only one or two teachers that I could discuss this with, because so many teachers feel threatened by having the students evaluate them, or threatened even to take a look at themselves. I still think the most important thing in teaching is that you cannot begin to know the children until you know yourself. The few times that this did come up, let's say in the lunchroom, or something, I had the different reactions from the other, many of the older teachers, let's say, and even some of the others that this was just another thing involved with the Gifted Program. In many instances we had the impression that they felt like we were mollycoddling our children, or I felt sometimes that they resented us, and resented the children. I know that in my own particular situation I often went out of my way to share the materials that I have with other teachers in the building, and some of them are quite happy about it, you know; they like this idea, and others felt like you weren't supposed to approach them, because they could do what they had to do without you. Maybe this is something wrong with me that I feel that they resent us, but on the

whole I like the teachers--I don't mean to imply that, but you just have the feeling that they were disapproving of you, or that you thought you were something special.

Interviewer: And that is not really true?

Teacher: I didn't personally, no. I found that on the whole that in working with these children if you just reason and make them aware of why certain things have to be, they are quite willing to go along with you, but if you start taking a heavy hand, for the sake of enforcement, why-- Just like myself, you can ask me to do practically anything, but you start bull-heading me around and I am likely to back up.

Interviewer: Can you think of anything else now?

Teacher: You know I think basically this comes back to cross communication between the consultants, and ourselves, and our director. I would like someone to help me to be a better teacher, you know. I don't feel any of us are perfect, and know some people might resent having someone come in and tell them how to do something or show them a different way, but I know for myself the advanced technology, psychology, and so on in teaching is going ahead so fast, and I think we should be made more aware of some of the new techniques, and allowed to try to implement them.

Interviewer: You like these workshops, in other words?

Teacher: Yes.

Interviewer: The program in general, you think as far as the kids are concerned, is pretty good and should continue?

Teacher: The only people, I know a couple of people with younger children, and the parents have been apprehensive because maybe the younger child wouldn't be accepted for the program, and this has worried them terribly. I would like to see some way worked out where these parents could be counseled or helped. I don't think it is fair, you know, that they should stew and worry about what this is going to do to little Jimmy because Johnny is in the program and Jimmy is not accepted. I know in some instances the younger children have said, oh, I hope I get to be a gifted, you know, when they are in the second grade.

I think also I have heard that some parents feel that they are not made aware of what is going on; they feel a lack of communication; they are not kept abreast; maybe they are, but they don't feel that they are. They feel they should know more maybe than what they do; maybe they just need to be reassured that they are doing the right thing by having a child in the program. In terms of--maybe the word is wrong--program. Maybe we shouldn't call it gifted; maybe we should find, you know, maybe special program IOS, because it still would mean the same thing, but maybe it wouldn't be quite so pronounced. I am definitely in favor of the program, and I would like to see it continued and expanded; I would like to see it maybe divorced a little bit from the administration of the regular school program. We often--different things have come up, and, no, it's not done, you know. Even in the area of sex education; I understand this is taboo, and yet I know that there are girls that I had in my health class, and we were discussing what types of things we should study and discuss, and one little girl said I think we should learn to know more about what is happening within us. I didn't know, so I talked to the principal about this, because the other girls shook their heads yes, and I was told that this was one subject, one topic that was absolutely taboo, and I was not to get anywhere near it. I know that the Y offers some programs and so on, but this is a natural part of life, and I am not pretending that I am the one that should do it, but I think these children are very sensitive, most of them; they are more emotionally aware.

Interviewer: They are ready for this before some of the other kids, is what you are saying, just like they are the academic work? It might be interesting to pursue this a little further.

Teacher:

I really don't think of anything I can add. Well, like you say if something is wrong, I know they have asked for anecdotal records. I think there should be some better way of doing this, whether it be that we maybe having a meeting once weekly or once every two weeks or once a month with somebody from Bradley to talk about some of the specific things with children. I know in terms of myself and the anecdotal records, by the time I get through with everything else, I think about it when I don't have the time to do it, and I don't think about it, you know, when I do. I realize they are important; I think there should be a more efficient way of getting them. As it is now we end up making notations, I think, at the end of each semester on those sheets. I know myself I have added a few things when they come back. Maybe we should meet with the research people more often.

Another thing. I don't know if it is true in other schools, but in many instances not only did the teachers feel that the other teachers maybe resented them, but the children felt resented by the other children. In some instances it was very difficult for them to feel a part of the school. I know many children, particularly on the seventh grade level, their big aim was not to be a member of the gifted program, but to be a member of that particular school, and whether there could be some way of changing that-- I frankly would like to see them all together in one building. I think that the teachers could exchange ideas much better; I think they would get a better follow-through; I think it would be to the children's advantage. I can't, I mean, if they are put in a special program, they are in a special program, and putting them in a special building, I can't see the difference. Parents who have children in different grades, they are ending up with children in three different schools, and it is really working a hardship on them so why can't we find one building where we put everybody together; I think the transfer of materials would then become less necessary; the coordination of the teachers and secretaries would be of more value. I think it would be a much smoother function.

I said I was through; I guess that's it.